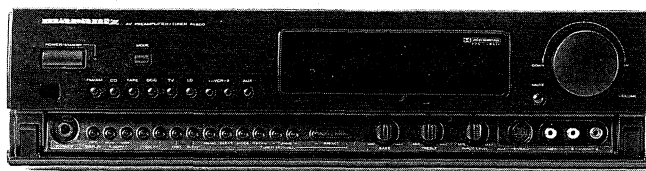


# Service Manual

**AV600U/K**  
**74AV600/02B**

**Audio/Video preamplifier/tuner**



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Please use this service manual with referring to the user guide(D.F.U.) without fail.

# marantz®

## model AV600

4822 725 51097  
PCS 85 893

## MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, **MARANTZ** company has created the ultimate in stereo sound. Only original **MARANTZ** parts can insure that your **MARANTZ** product will continue to perform to the specifications for which it is famous.

Parts for your **MARANTZ** equipment are generally available to our National Marantz Subsidiary or Agent.

### ORDERING PARTS:

Parts can be ordered either by mail or by Fax.. In both cases, the correct part number has to be specified.

The following information must be supplied to eliminate delays in processing your order:

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature: any order form or Fax. must be signed, otherwise such part order will be considered as null and void.

#### USA

MARANTZ AMERICA, INC.  
440 MEDINAH ROAD  
ROSELLE, ILLINOIS 60172-2330  
USA  
PHONE : 708-307-3100  
FAX : 708-307-2687

#### CANADA

LENBROOK INDUSTRIES LIMITED  
633 GRANITE COURT,  
PICKERING, ONTARIO L1W 3K1  
CANADA  
PHONE : 416-831-6333  
FAX : 416-831-6936

#### EUROPE

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THE NETHERLANDS  
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FAX : +31-40-735578

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SUPERSCOPE TECHNOLOGIES, INC.  
MARANTZ PROFESSIONAL PRODUCTS  
1000 CORPORATE BLVD., SUITE D  
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PHONE : 708-820-4800  
FAX : 708-820-8103

#### PROFESSIONAL-CANADA

TC ELECTRONICS CANADA LTD  
540 FIRING AVE.  
BAIE D'URFÉ, QUEBEC H9X 3T2  
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PHONE : 514-457-4044  
FAX : 514-457-5524

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THE NETHERLANDS  
PHONE : +31-40-732241  
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Australia Centre  
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FAX : +61 2 7643074

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FORWARD INTERNATIONAL CORP. LTD.  
15 TH FLOOR, REGENT CENTRE,  
88 QUEEN'S ROAD, CENTRAL, H. K.  
PHONE : +852 521-0883  
FAX : +852 521-7835

#### THAILAND

MRZ STANDARD CO., LTD.  
746-750 WANGBURAPA BANGKOK  
10200 THAILAND  
PHONE : +66 2222 9181  
FAX : +66 2225 8871

#### TAIWAN

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6 TH FL NO. 148 SUNG KIANG RORD,  
TAIPEI, 10429. TAIWAN R.O.C.  
PHONE : +886 (2) 5221304-8  
FAX : +886 (2) 5630415

#### MALAYSIA

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NO. 102 JALAN SS 21/35, DAMANSARA  
UTAMA, 47400 PETALING JAYA  
SELANGOR DARUL EHSAN,  
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FAX : +60 3-7173828

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SINGAPORE 0315,  
PHONE : +65 475-4555  
FAX : +65 475-8623

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Japan  
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FAX : +81 427 48 0889

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営業本部 〒150 東京都渋谷区恵比寿南 1 丁目 11 番 9 号

### SHOCK, FIRE HAZARD SERVICE TEST:

**CAUTION:** After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins ( with unit NOT connected to AC mains and its Power switch ON ), and the face or Front Panel of product and controls and chassis bottom.

Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before it is return to the user/customer.

Ref. UL Standard NO.1492.

In case of difficulties, do not hesitate to contact the Technical  
Department at above mentioned address.

# 1. TECHNICAL SPECIFICATIONS

## FM TUNER SECTION

Frequency Range .....	87.5 — 108.0 MHz
Usable Sensitivity .....	IHF 1.3 $\mu$ V/13.5dB
Signal to Noise Ratio .....	Mono/Stereo 76/68 dB
Distortion.....	Mono/Stereo 0.2/0.5 %
Stereo Separation.....	1 kHz 40 dB
A.C.S. ....	$\pm$ 400 kHz 65 dB (U version)
	$\pm$ 300 kHz 65 dB (K version)
	$\pm$ 300 kHz 65 dB (/02B version)
Image Rejection.....	98 MHz 50 dB (U/K version)
	70 dB (/02B version)
Tuner Output Level .....	1 kHz, $\pm$ 75 kHz Dev 800 mV (U version)
	1 kHz, $\pm$ 40 kHz Dev 800 mV (K version)
	1 kHz, $\pm$ 40 kHz Dev 800 mV (/02B version)

## MW/LW TUNER SECTION

Frequency Range .....	520 — 1710 kHz (U version)
	531 — 1602 kHz (K version)
	152 — 282 kHz (LW, /02B version)
	531 — 1602 kHz (MW, /02B version)
Signal to Noise Ratio .....	50 dB
Usable Sensitivity .....	Loop 500 $\mu$ V
Distortion.....	1 kHz, 30 % Mod. 0.5 %
Selectivity.....	$\pm$ 20 kHz 70 dB (U version)
	$\pm$ 9 kHz 30 dB (K version)
	$\pm$ 9 kHz 30 dB (/02B version)

## AUDIO

Input Sensitivity/Impedance.....	168 mV/47 Kohms
Output Level/Impedance.....	1.0 V/600 ohms
Total Harmonic Distortion.....	0.006 %
Crosstalk.....	76 dB/ 10 kHz
Audio Frequency Response .....	10 Hz to 30 kHz (—3 dB)
Noise VOL MIN (Weighted).....	3.5 $\mu$ V
VOL MAX (Weighted) .....	15 $\mu$ V
S/N.....	90 dB
Dolby Surround Channel Separation.....	40 dB

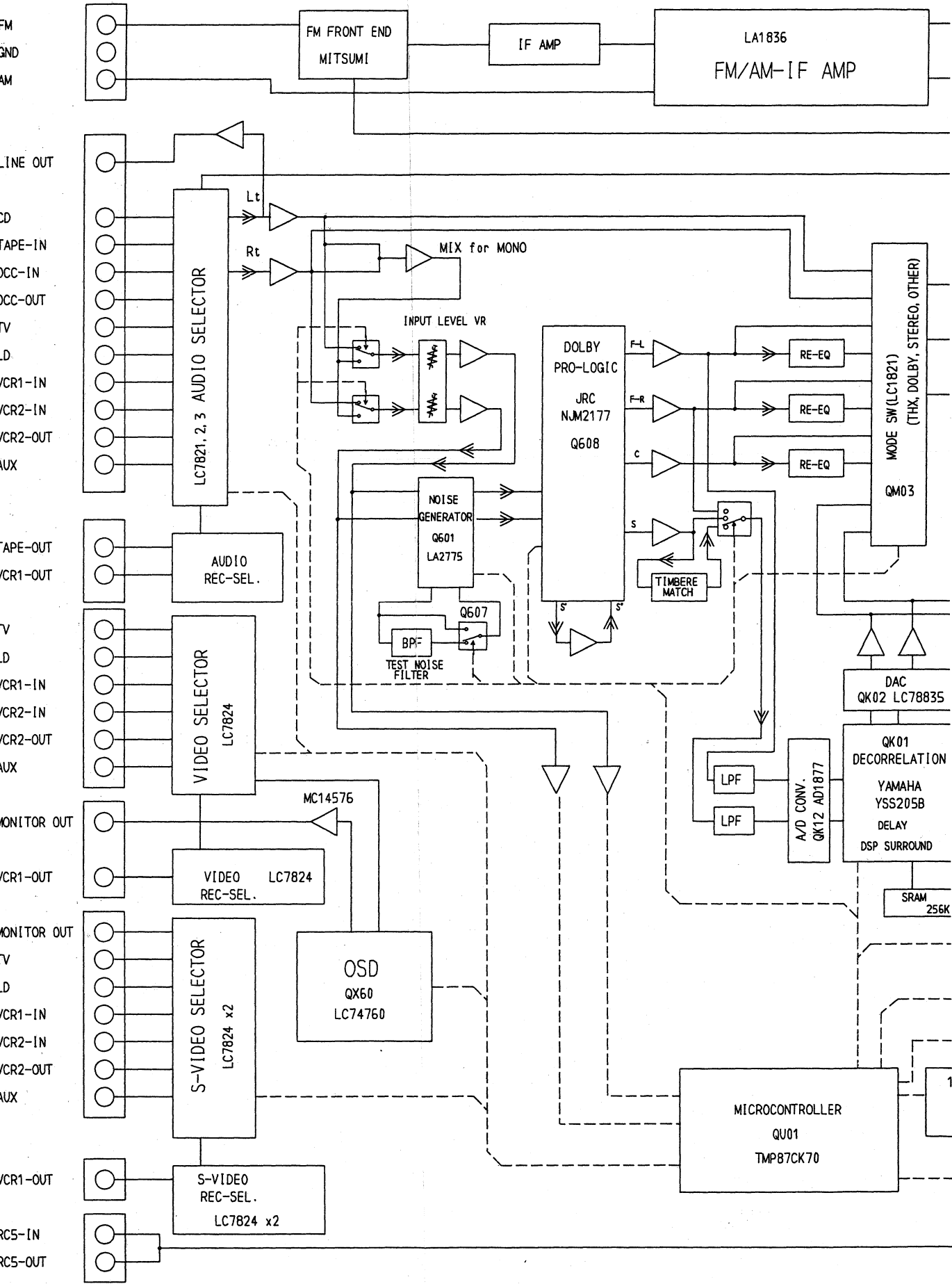
## VIDEO

Television Format.....	NTSC (U version)
	PAL/SECAM/NTSC (K version)
	PAL/SECAM/NTSC (/02B version)
Input Level/Impedance .....	1 Vp-p/75 ohms
Output Level/Impedance.....	1 Vp-p/75 ohms
Video Frequency Response .....	5 Hz to 8 MHz (—3 dB)
S/N.....	60 dB

## GENERAL

Power Requirement.....	AC 120 V 60 Hz (U version)
	AC 110/220 V 50/60 Hz (K version)
	AC 230 V 50 Hz (/02B version)
Power Consumption .....	30 W
Dimension (MAX) .....	
Width.....	16-3/4 inches ( 426 mm)
Height .....	4-3/8 inches (112.5mm)
Depth .....	14-3/8 inches (366.6mm)
Weight.....	12 lbs (5.4 kg)

# 2. BLOCK DIAGRAM



2. BLOCK DIAGRAM

i — 108.0 MHz  
1.3  $\mu$ V/13.5dB  
tereo 76/68 dB  
ereo 0.2/0.5 %  
... 1 kHz 40 dB  
dB (U version)  
dB (K version)  
(/02B version)  
3 (U/K version)  
(/02B version)  
nV (U version)  
nV (K version)  
(/02B version)

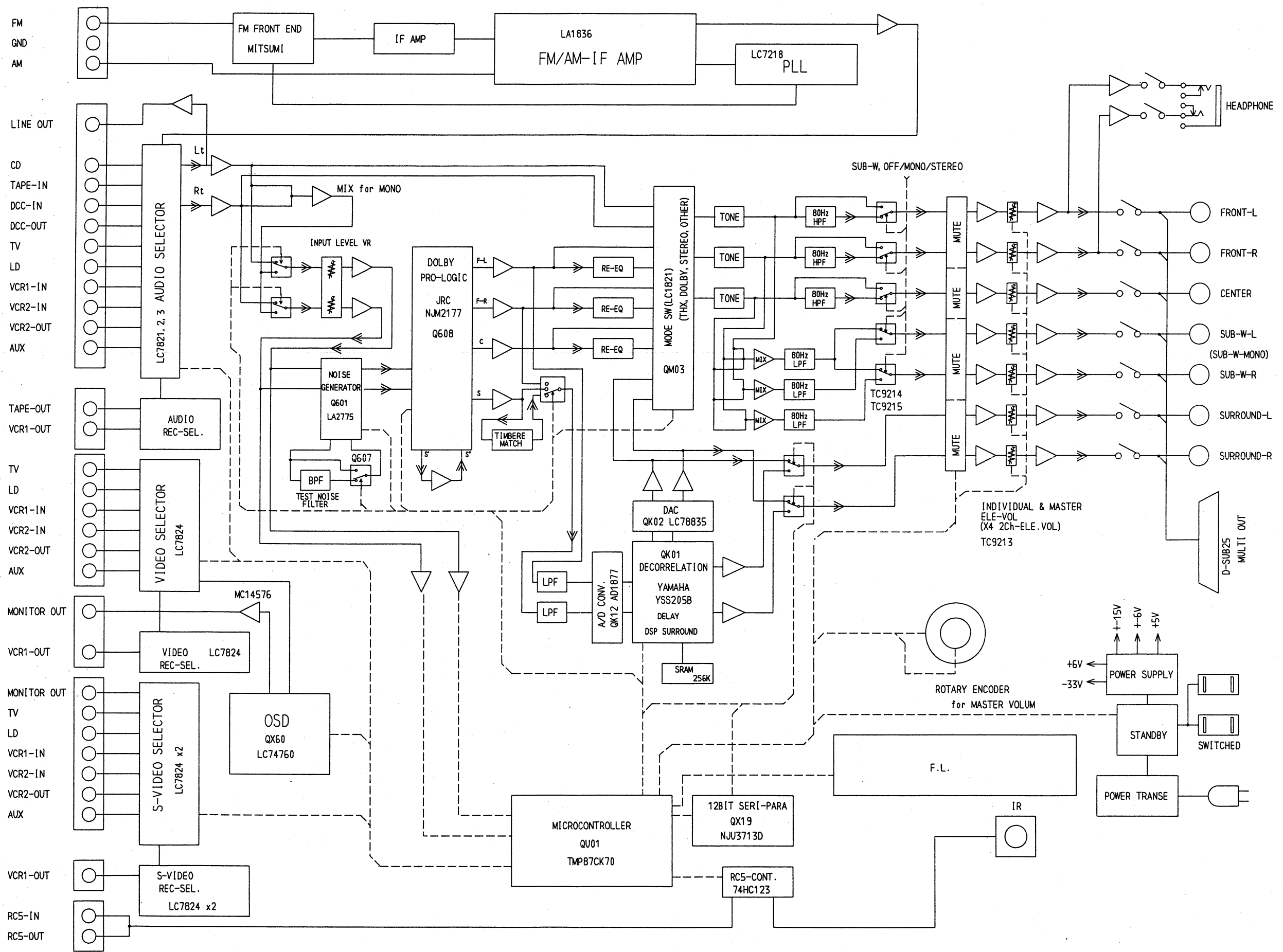
Hz (U version)  
Hz (K version)  
(/02B version)  
(/02B version)  
..... 50 dB  
...Loop 500  $\mu$ V  
% Mod. 0.5 %  
dB (U version)  
dB (K version)  
(/02B version)

mV/47 Kohms  
.0 V/600 ohms  
..... 0.006 %  
76 dB/ 10 kHz  
0 kHz (—3 dB)  
.....3.5  $\mu$ V  
.....15  $\mu$ V  
.....90 dB  
.....40 dB

3C (U version)  
3C (K version)  
(/02B version)  
Vp-p/75 ohms  
Vp-p/75 ohms  
MHz (—3 dB)  
.....60 dB

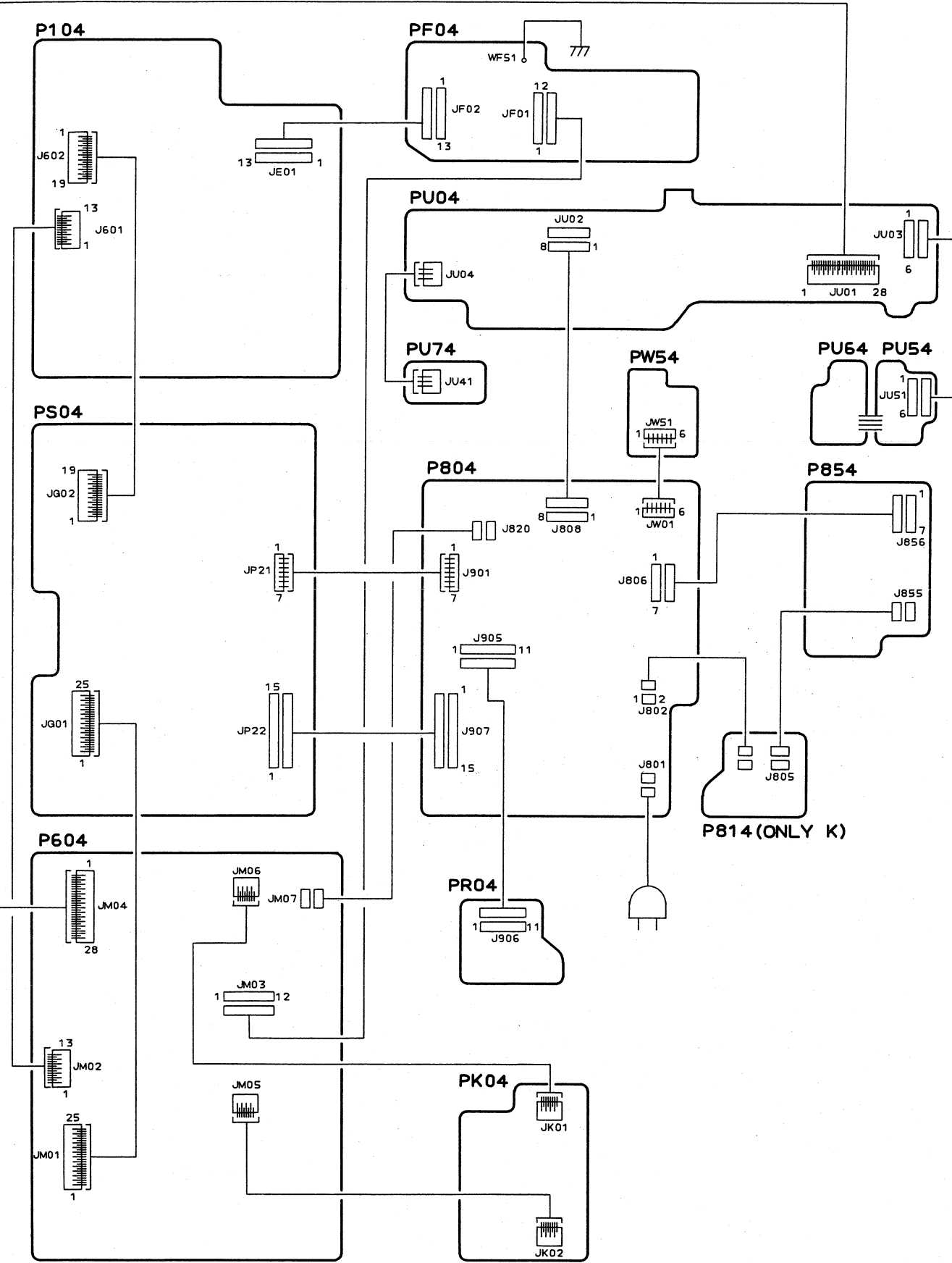
Hz (U version)  
Hz (K version)  
(/02B version)  
.....30 W

hes ( 426 mm)  
ies (112.5mm)  
ies (366.6mm)  
12 lbs (5.4 kg)





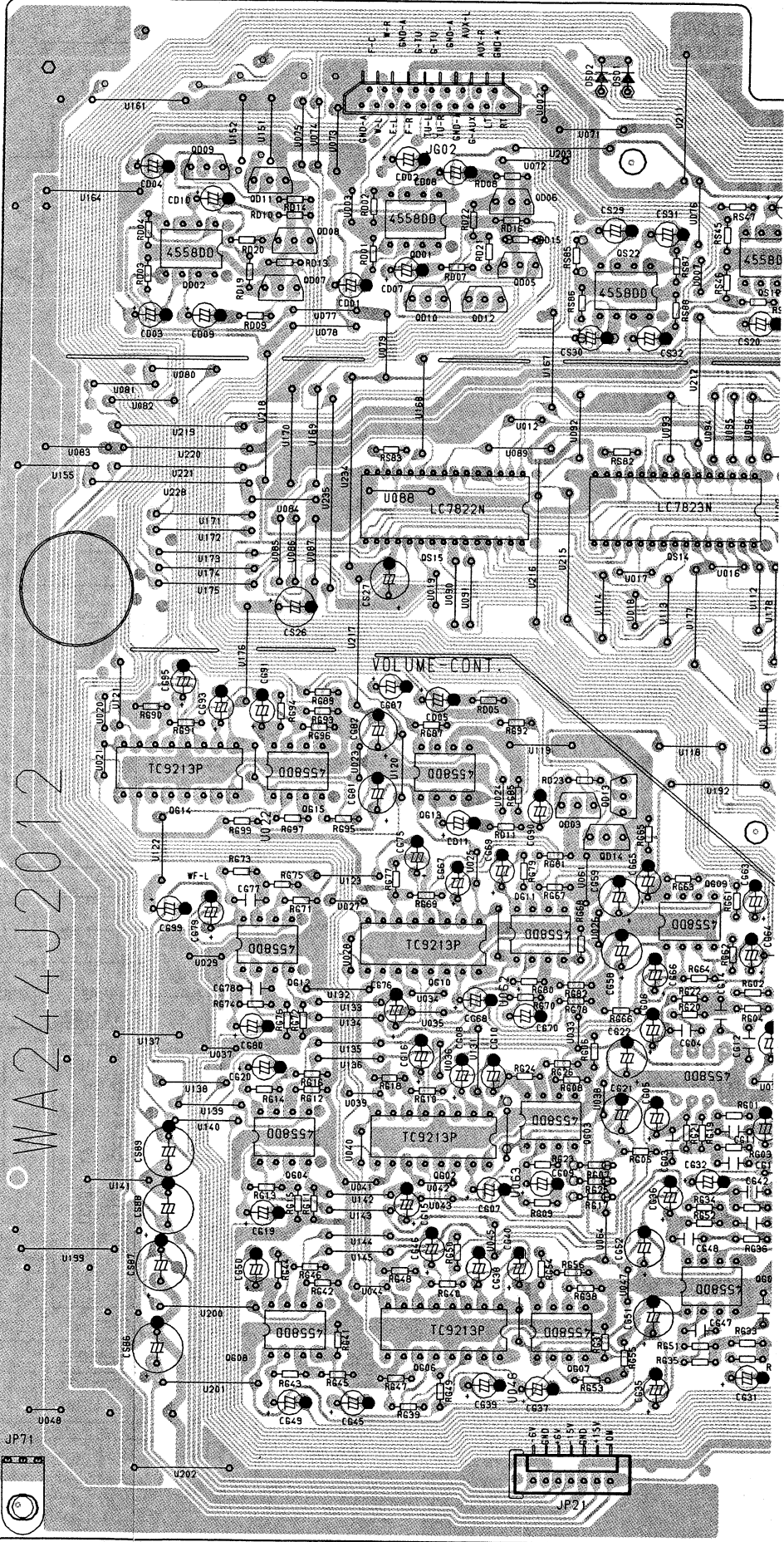
3. WIRING DIAGRAM



4. SCHEMATIC DIAGRAM AND PARTS LOCATION (Pattern Side)

QG15	QD01	QD06	QS22	QS1
QG12	QD10	QD05	QD03	QS14
QG04	QS15	QD12	QD13	QG09
QD02	QG08	QG10	QG13	QG11
QG14	QD11	QG02	QG03	QD14
QD07-QD09	QG06	QG07		QG05

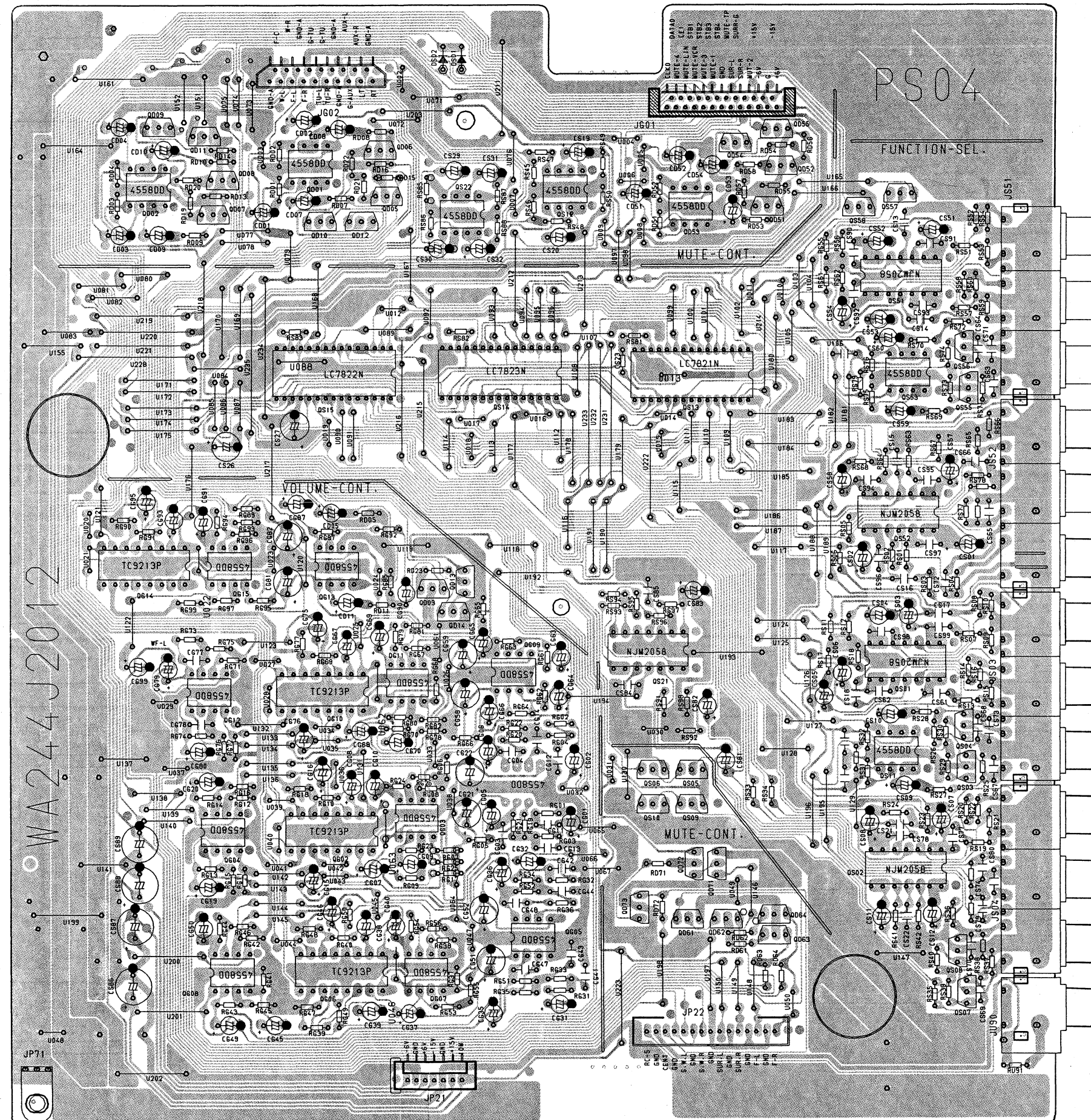
PS04



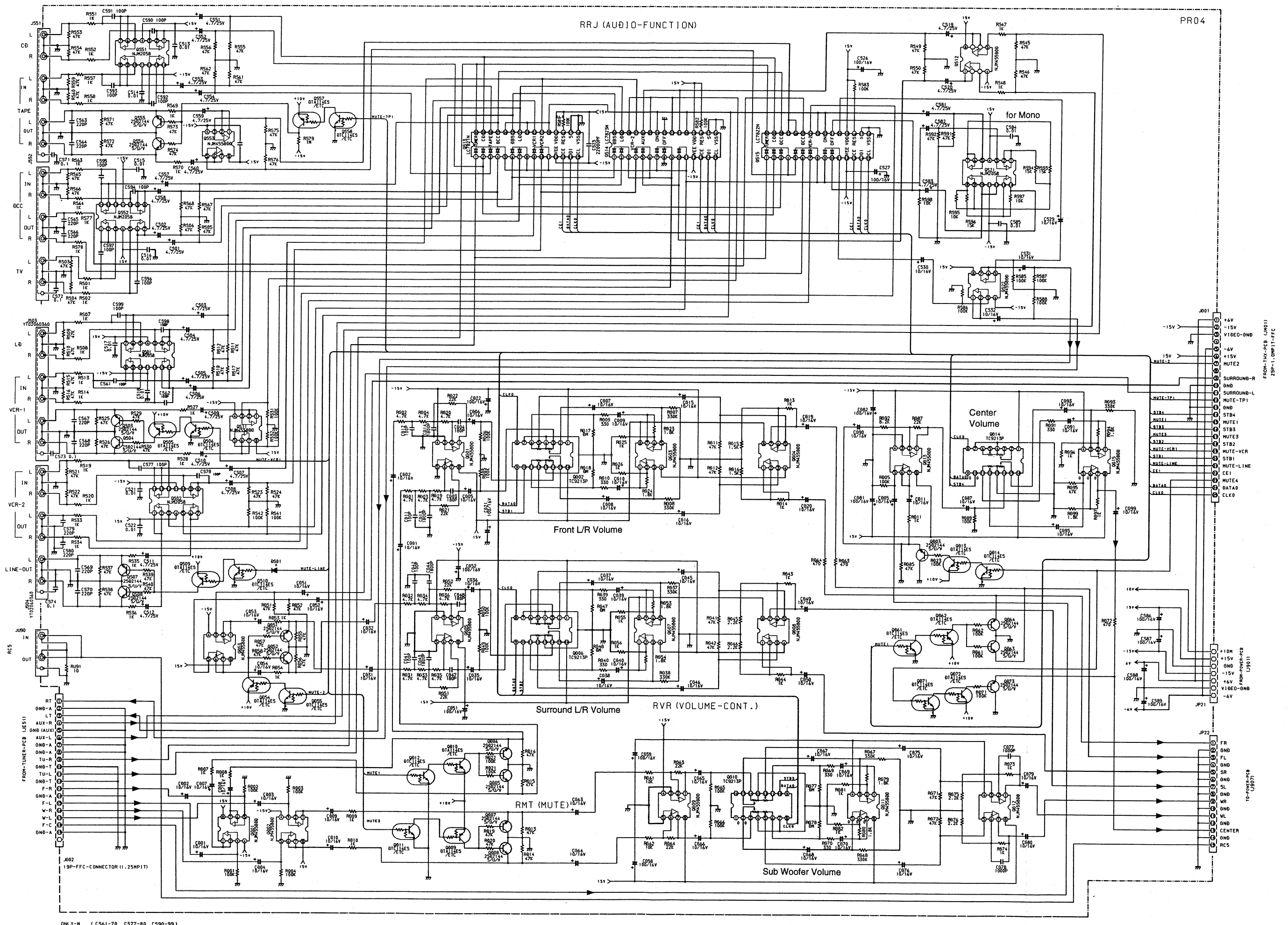
#### 4. SCHEMATIC DIAGRAM AND PARTS LOCATION (Pattern Side)

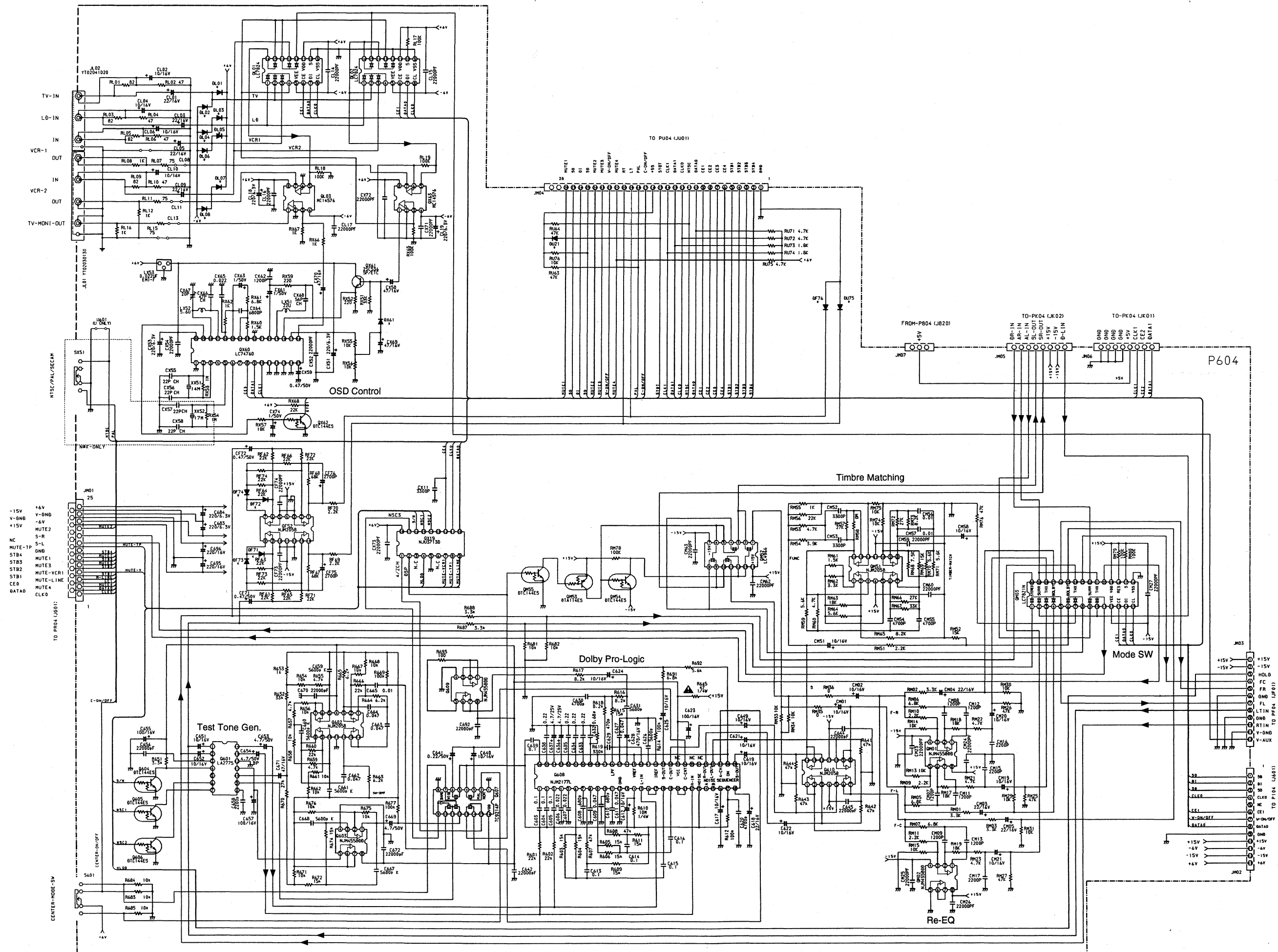
QG15	QD01	QD06	QS22	QS12		QD51-QD55	QS55-QS58
QG12	QD10	QD05	QD03	QS14			QS51-QS53
QG04	QS15	QD12	QD13	QG09	QS21	QS13	QS01-QS04
QD02	QG08	QG10	QG13	QD14	QS06	QS05	QS11
QG14	QD11	QG02			QS10	QS09	QS08
QD07-QD09	QG06	QG07			QD71-QD73	QD61-QD64	QS07

PS04





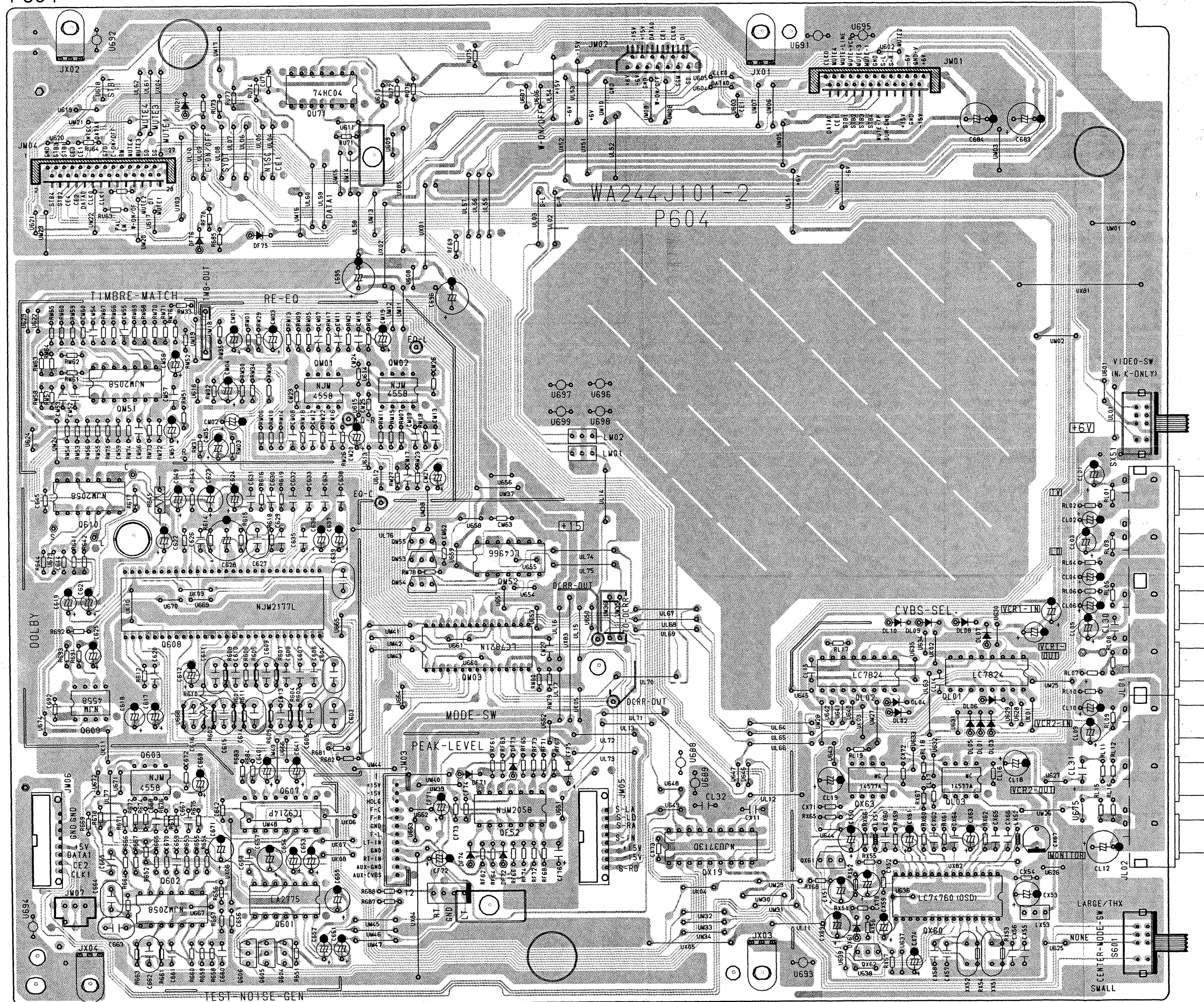




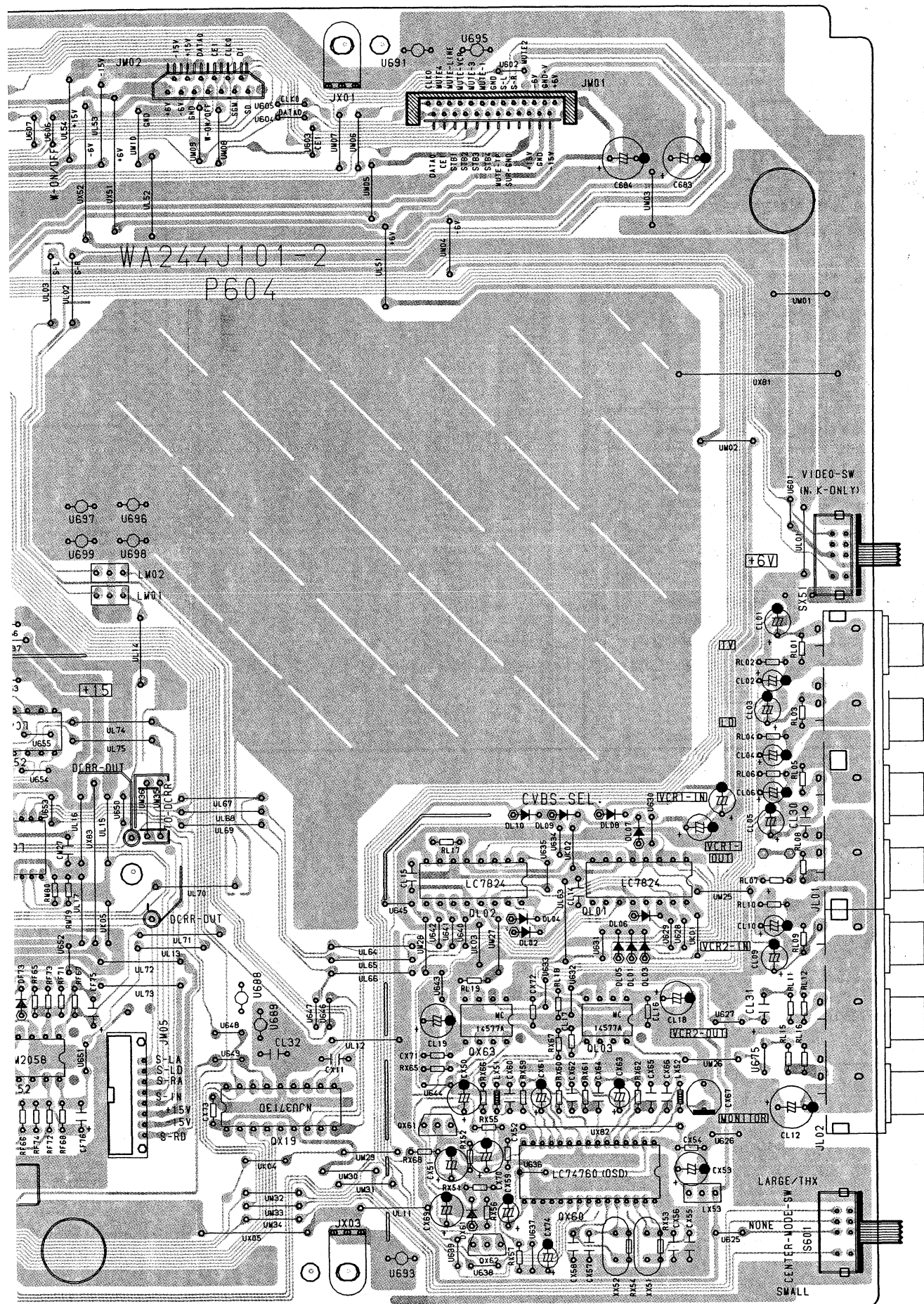


Q610 Q608 Q604-Q607 Q601 Q603 Q602 Q605 Q606 Q607 Q608 Q609 Q610 Q611 Q612 Q613 Q614 Q615 Q616 Q617 Q618 Q619 Q620 Q621 Q622 Q623 Q624 Q625 Q626 Q627 Q628 Q629 Q630 Q631 Q632 Q633 Q634 Q635 Q636 Q637 Q638 Q639 Q640 Q641 Q642 Q643 Q644 Q645 Q646 Q647 Q648 Q649 Q650 Q651 Q652 Q653 Q654 Q655 Q656 Q657 Q658 Q659 Q660 Q661 Q662 Q663 Q664 Q665 Q666 Q667 Q668 Q669 Q670 Q671 Q672 Q673 Q674 Q675 Q676 Q677 Q678 Q679 Q680 Q681 Q682 Q683 Q684 Q685 Q686 Q687 Q688 Q689 Q690 Q691 Q692 Q693 Q694 Q695 Q696 Q697 Q698 Q699 Q700 Q701 Q702 Q703 Q704 Q705 Q706 Q707 Q708 Q709 Q710 Q711 Q712 Q713 Q714 Q715 Q716 Q717 Q718 Q719 Q720 Q721 Q722 Q723 Q724 Q725 Q726 Q727 Q728 Q729 Q730 Q731 Q732 Q733 Q734 Q735 Q736 Q737 Q738 Q739 Q740 Q741 Q742 Q743 Q744 Q745 Q746 Q747 Q748 Q749 Q750 Q751 Q752 Q753 Q754 Q755 Q756 Q757 Q758 Q759 Q760 Q761 Q762 Q763 Q764 Q765 Q766 Q767 Q768 Q769 Q770 Q771 Q772 Q773 Q774 Q775 Q776 Q777 Q778 Q779 Q780 Q781 Q782 Q783 Q784 Q785 Q786 Q787 Q788 Q789 Q790 Q791 Q792 Q793 Q794 Q795 Q796 Q797 Q798 Q799 Q800 Q801 Q802 Q803 Q804 Q805 Q806 Q807 Q808 Q809 Q810 Q811 Q812 Q813 Q814 Q815 Q816 Q817 Q818 Q819 Q820 Q821 Q822 Q823 Q824 Q825 Q826 Q827 Q828 Q829 Q830 Q831 Q832 Q833 Q834 Q835 Q836 Q837 Q838 Q839 Q840 Q841 Q842 Q843 Q844 Q845 Q846 Q847 Q848 Q849 Q850 Q851 Q852 Q853 Q854 Q855 Q856 Q857 Q858 Q859 Q860 Q861 Q862 Q863 Q864 Q865 Q866 Q867 Q868 Q869 Q870 Q871 Q872 Q873 Q874 Q875 Q876 Q877 Q878 Q879 Q880 Q881 Q882 Q883 Q884 Q885 Q886 Q887 Q888 Q889 Q890 Q891 Q892 Q893 Q894 Q895 Q896 Q897 Q898 Q899 Q900 Q901 Q902 Q903 Q904 Q905 Q906 Q907 Q908 Q909 Q910 Q911 Q912 Q913 Q914 Q915 Q916 Q917 Q918 Q919 Q920 Q921 Q922 Q923 Q924 Q925 Q926 Q927 Q928 Q929 Q930 Q931 Q932 Q933 Q934 Q935 Q936 Q937 Q938 Q939 Q940 Q941 Q942 Q943 Q944 Q945 Q946 Q947 Q948 Q949 Q950 Q951 Q952 Q953 Q954 Q955 Q956 Q957 Q958 Q959 Q960 Q961 Q962 Q963 Q964 Q965 Q966 Q967 Q968 Q969 Q970 Q971 Q972 Q973 Q974 Q975 Q976 Q977 Q978 Q979 Q980 Q981 Q982 Q983 Q984 Q985 Q986 Q987 Q988 Q989 Q990 Q991 Q992 Q993 Q994 Q995 Q996 Q997 Q998 Q999

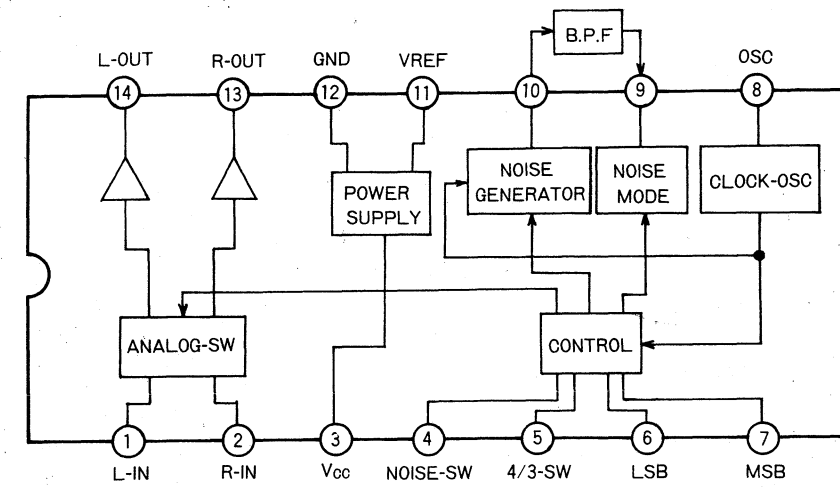
P604



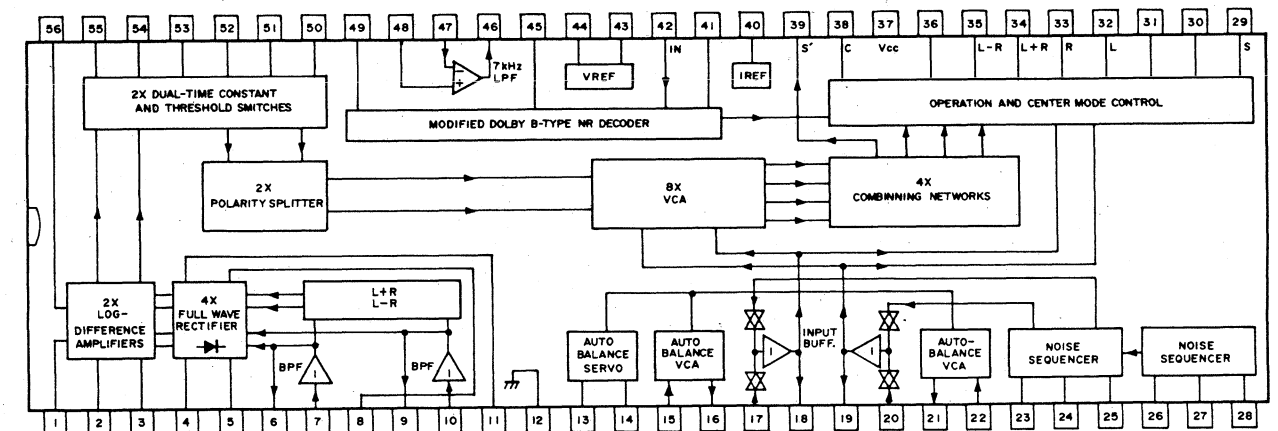


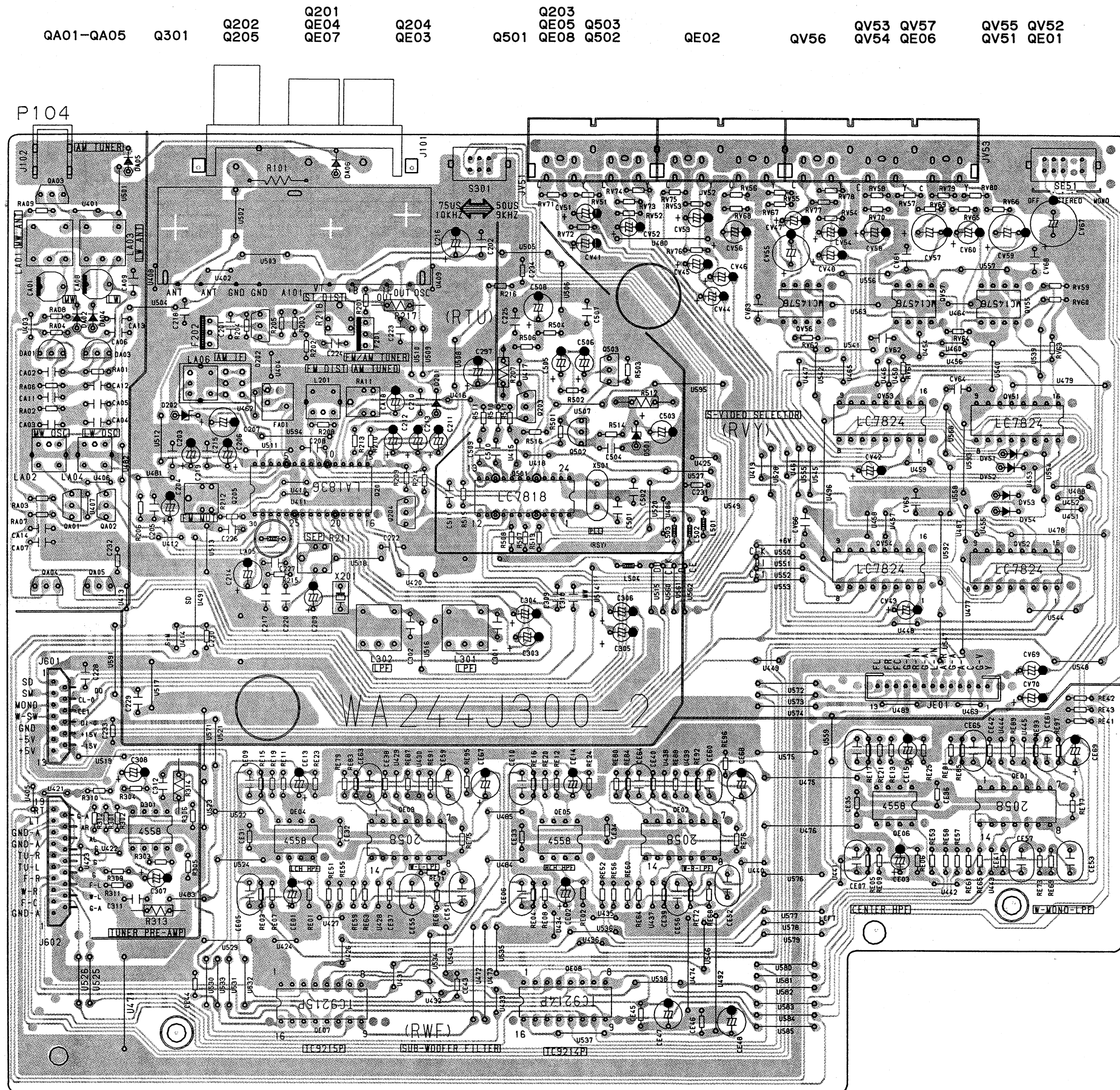


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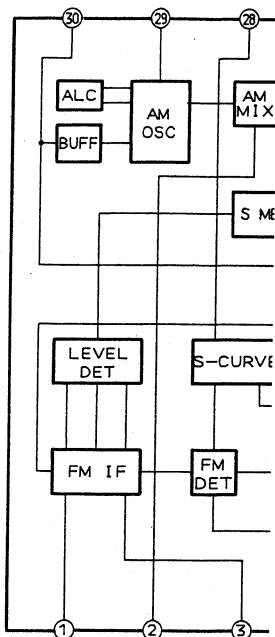


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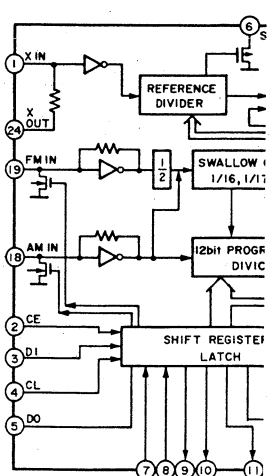




Q201:LA1836



Q501:LC7218





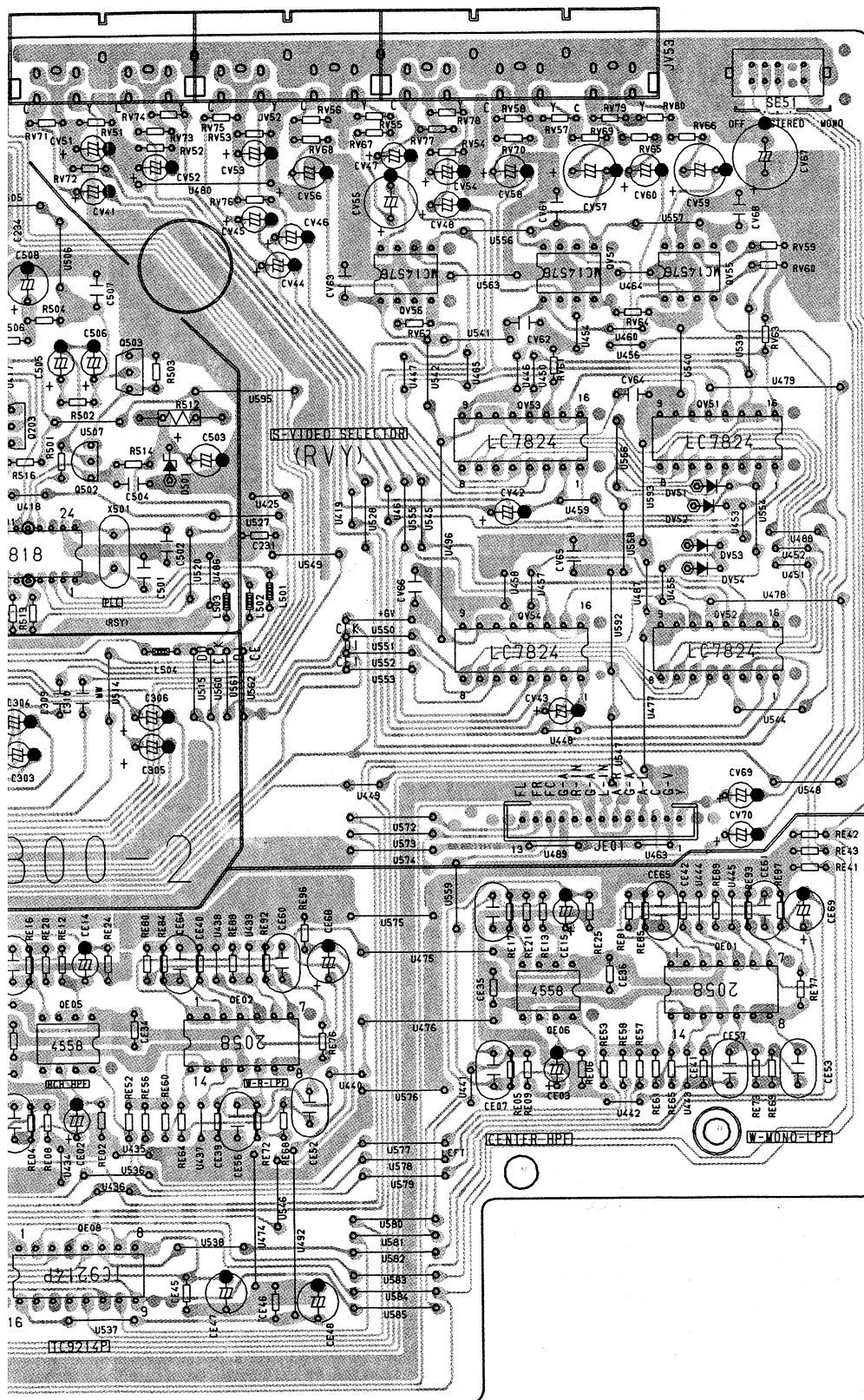
Q203  
QE05 Q503  
QE08 Q502

QE02

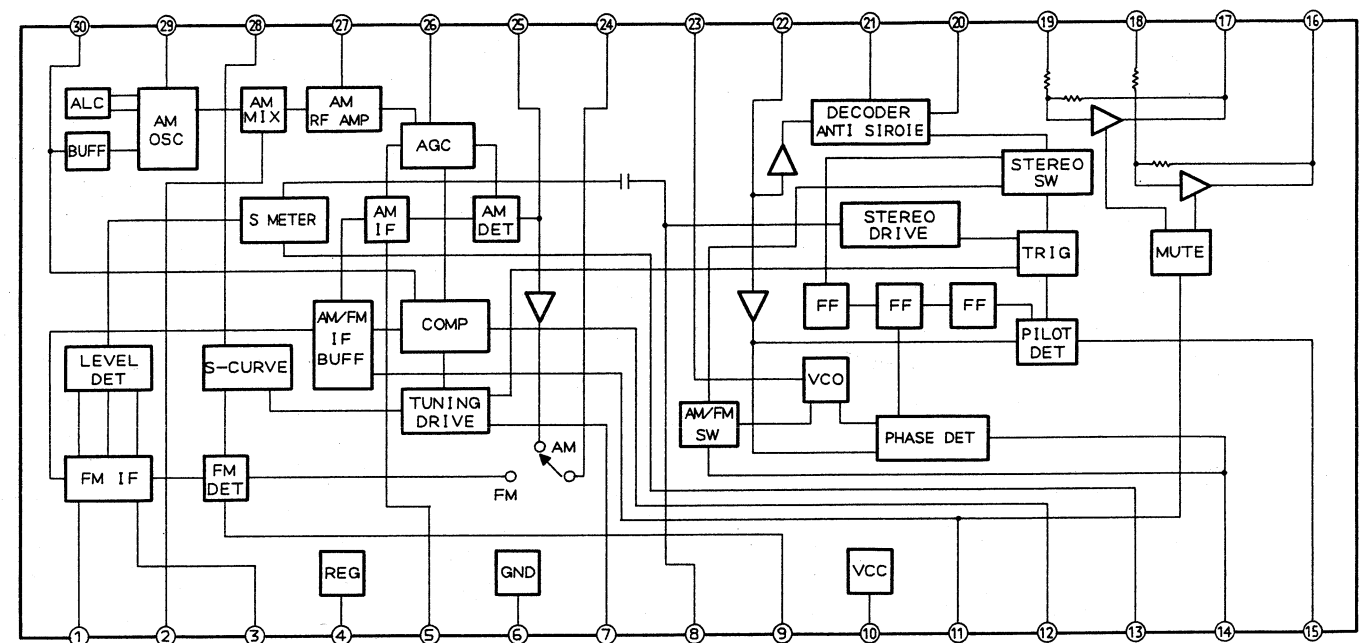
QV56

QV53 QV57  
QV54 QE06

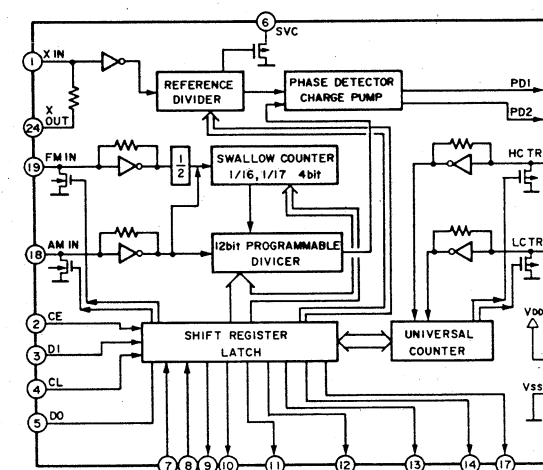
QV55 QV52  
QV51 QE01



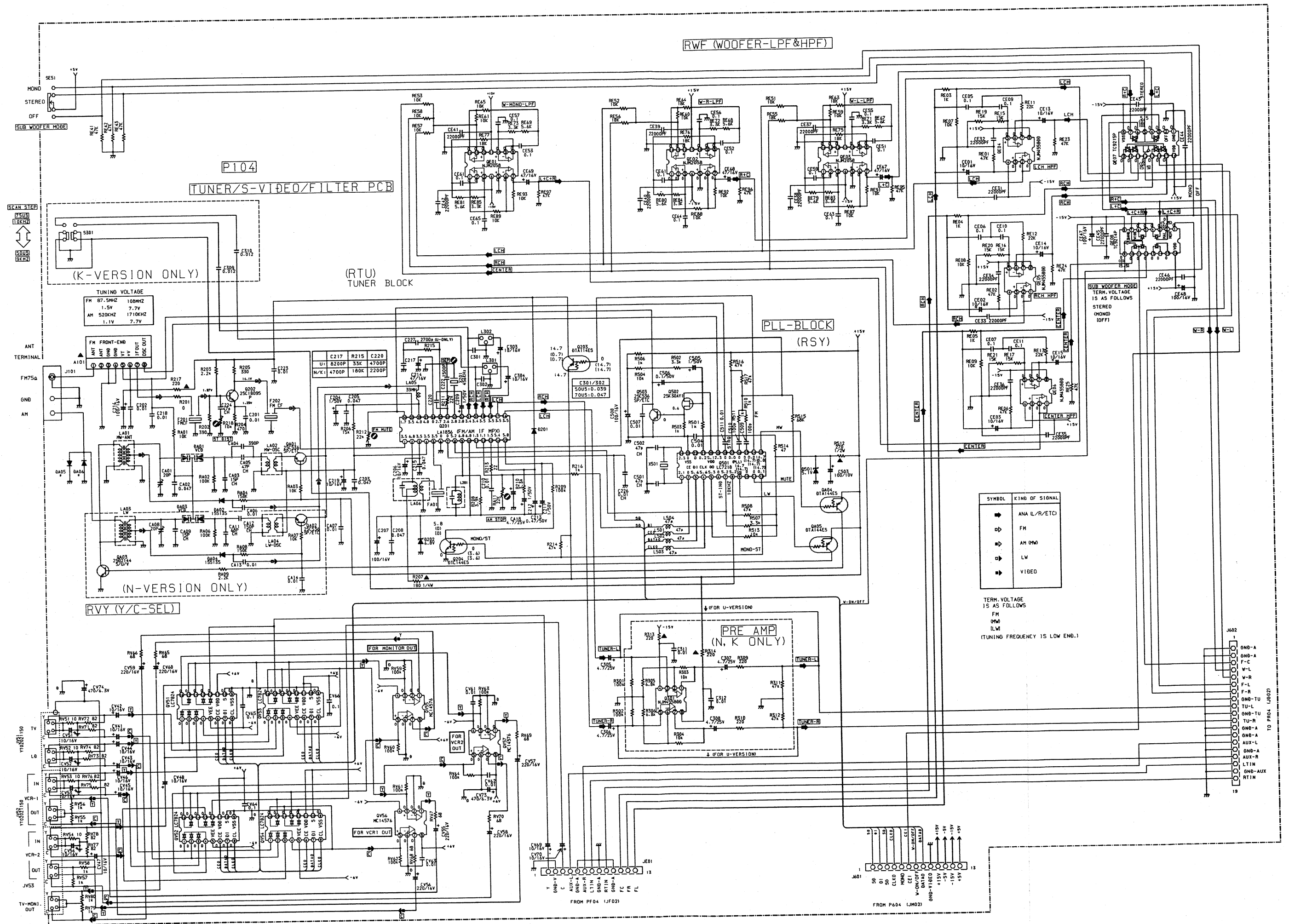
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Q501:LC7218



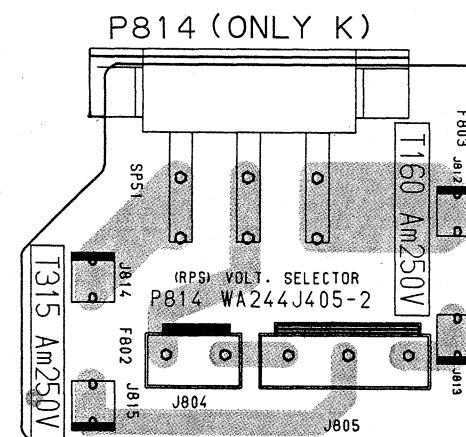
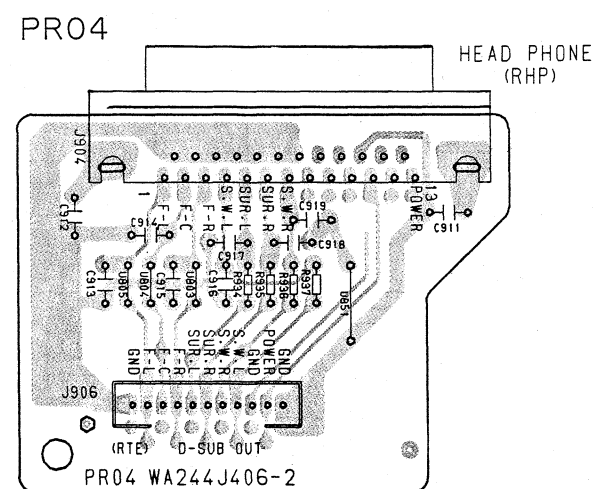
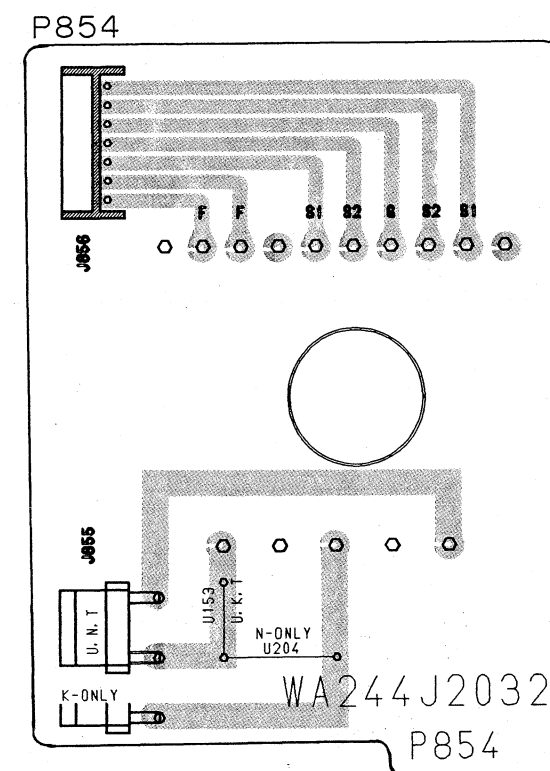
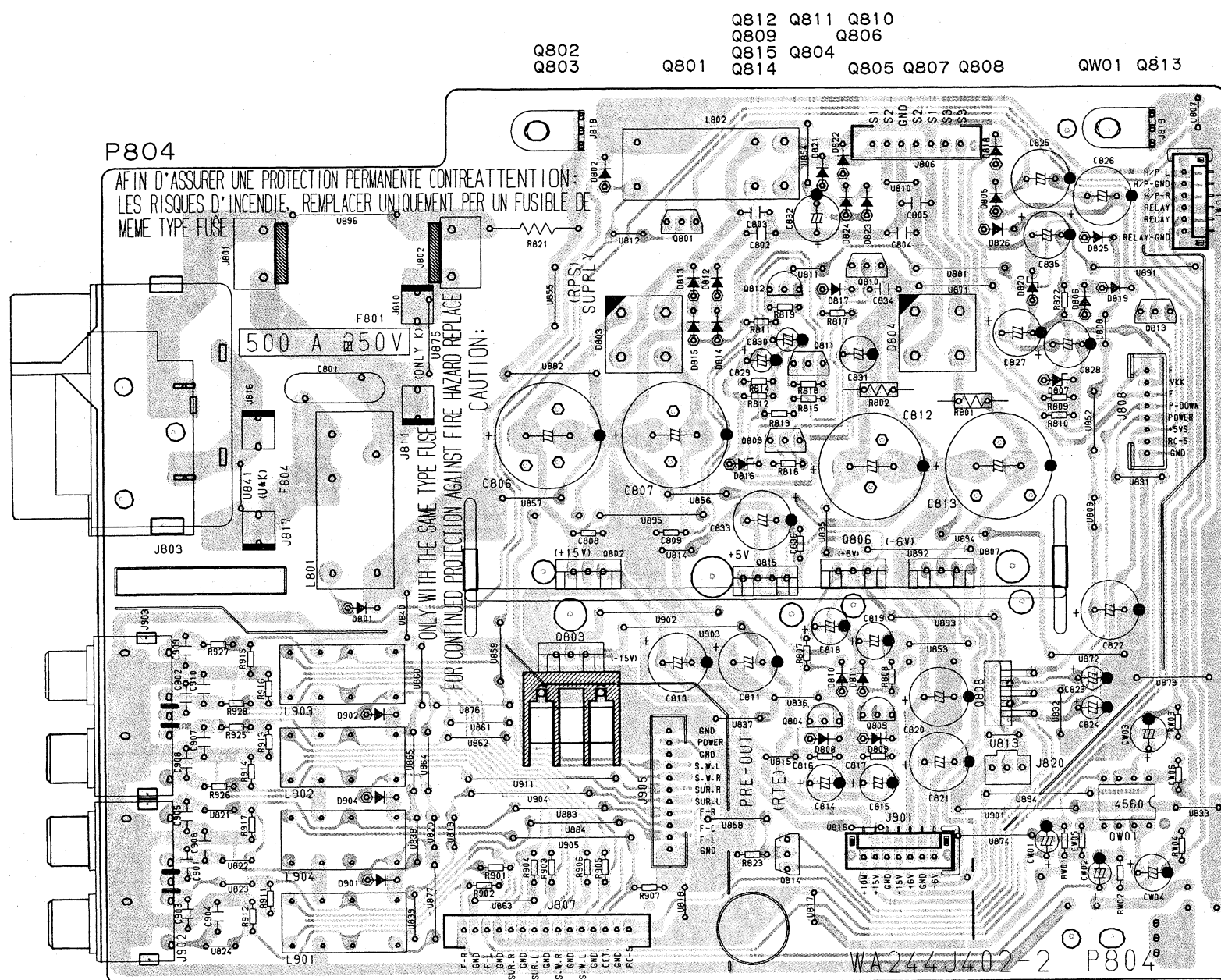




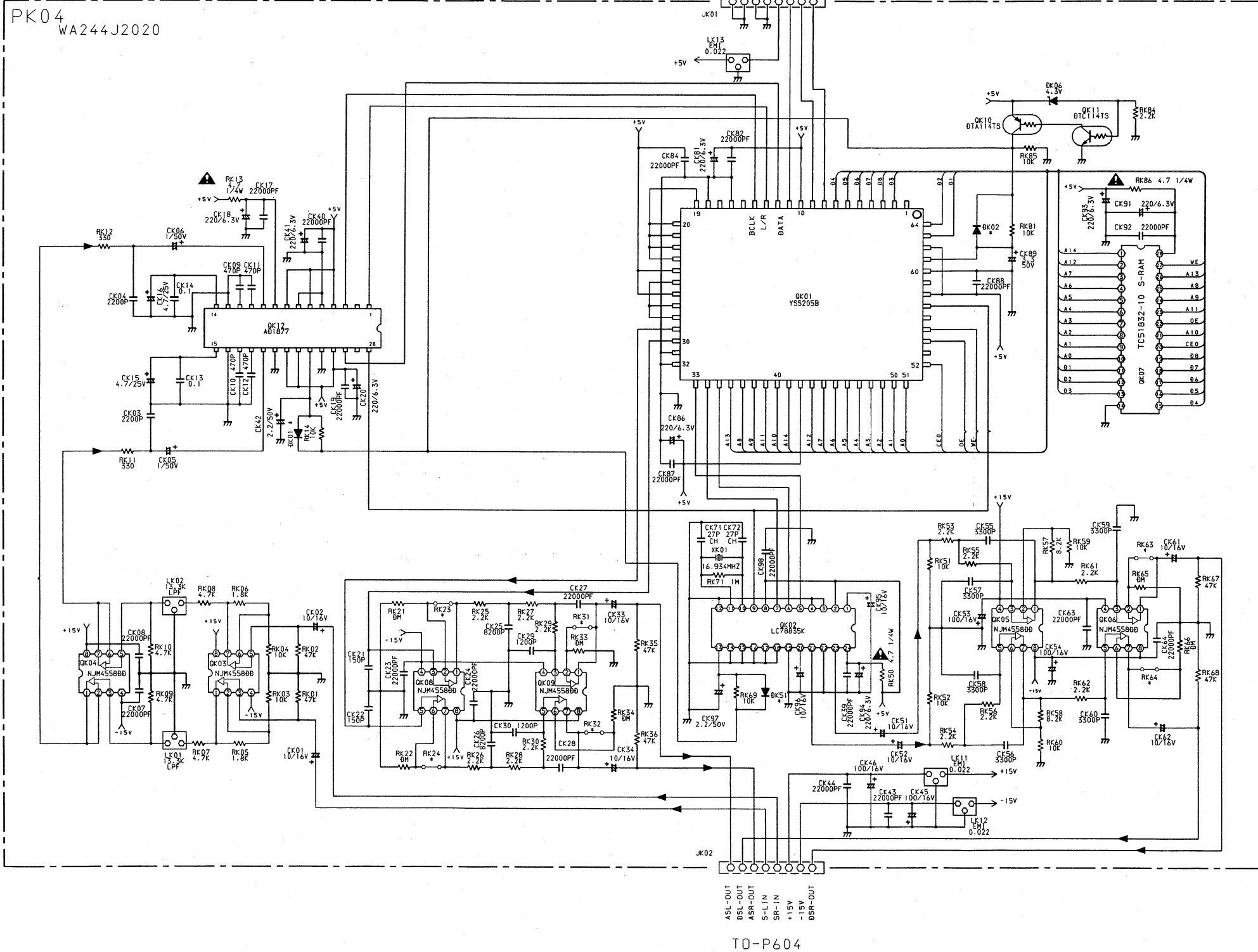




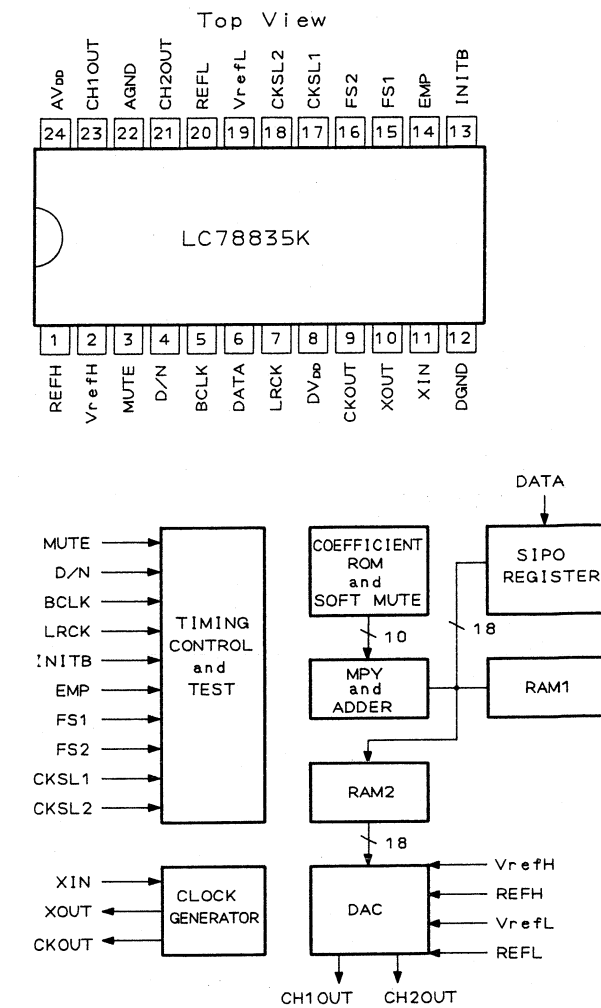




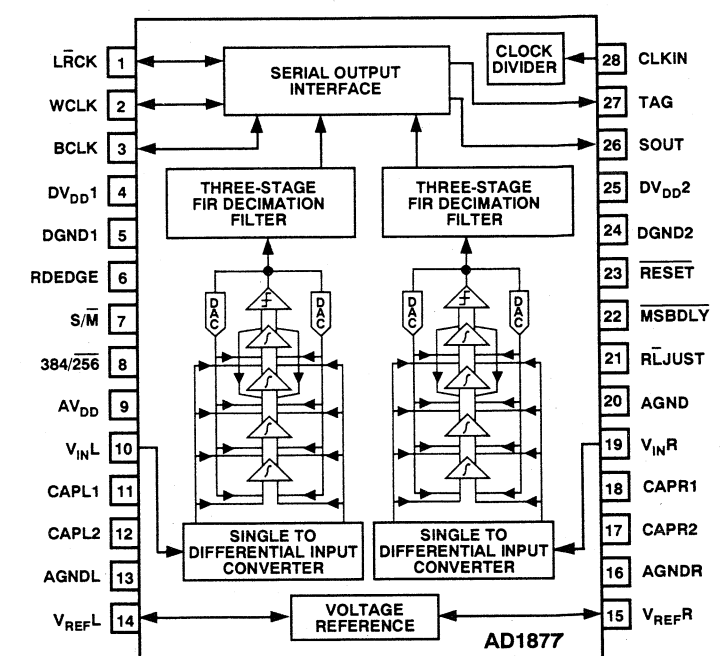




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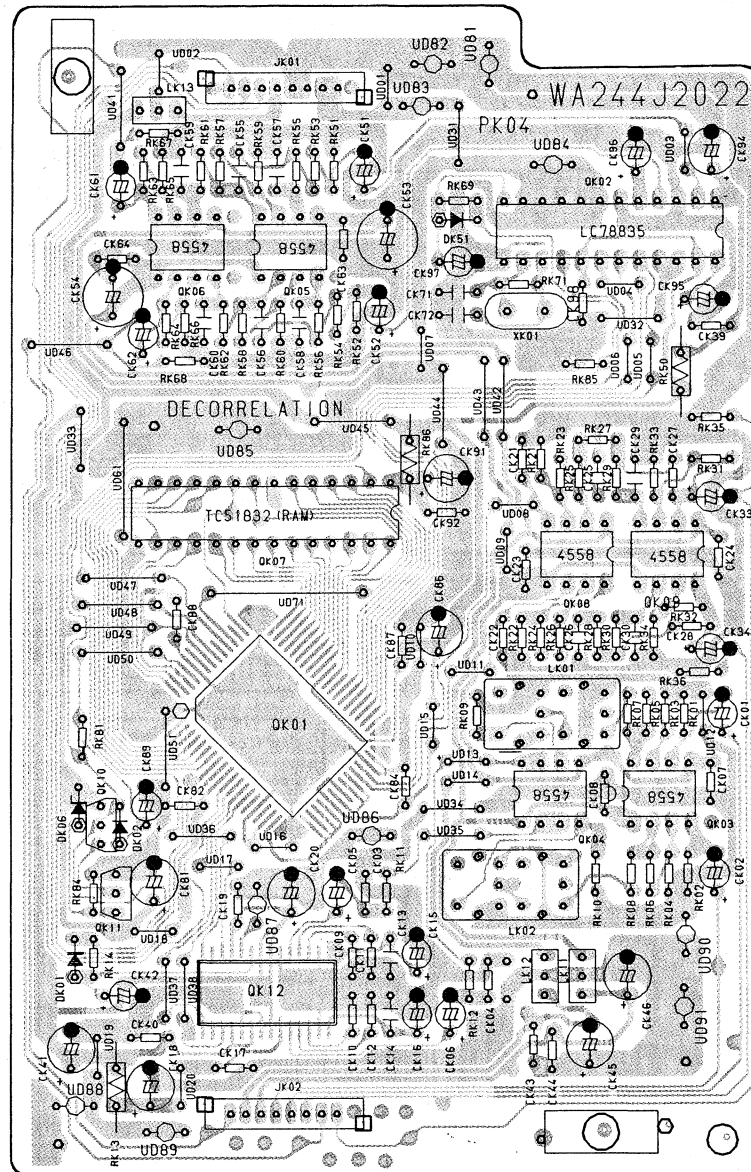
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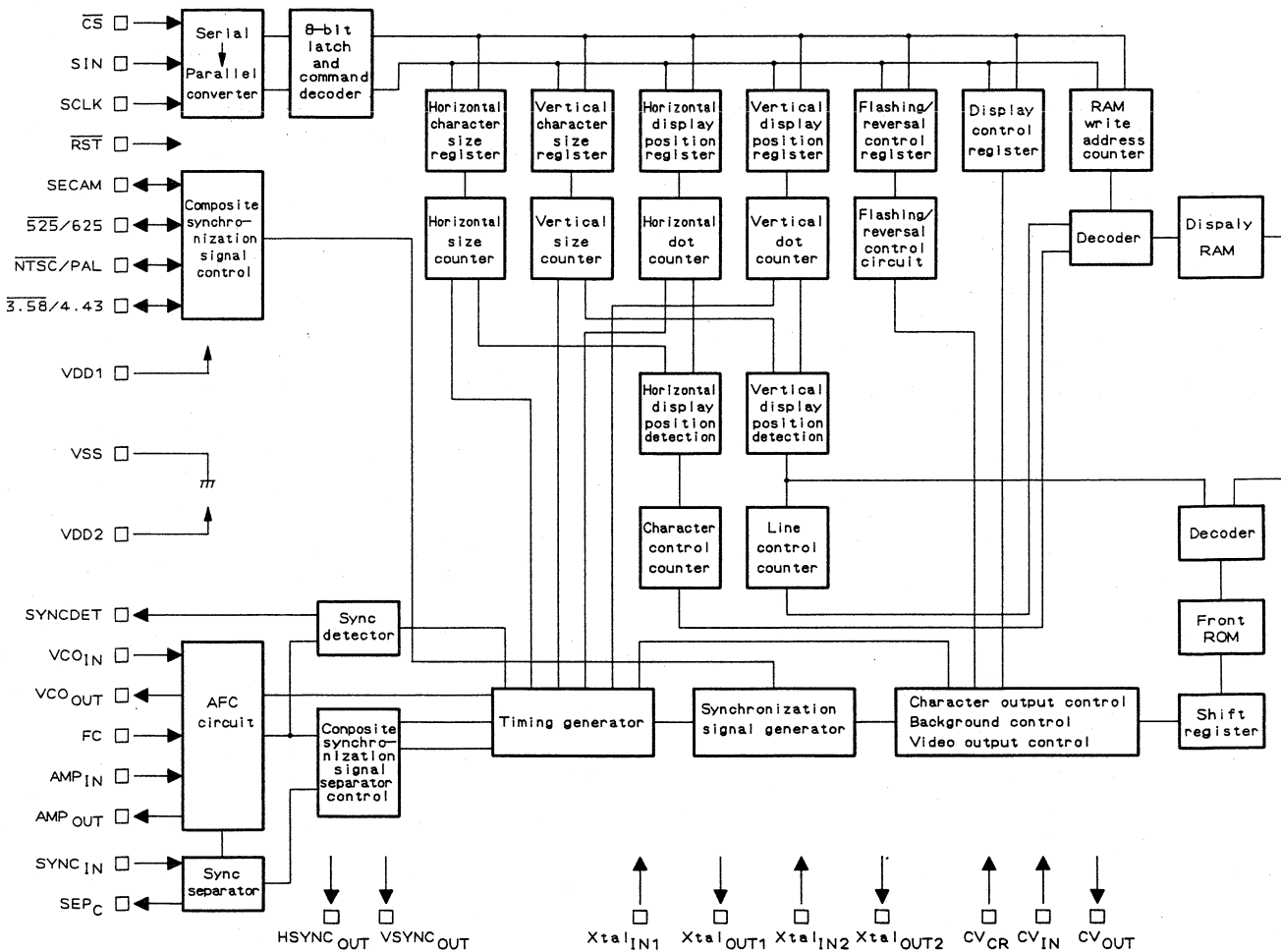
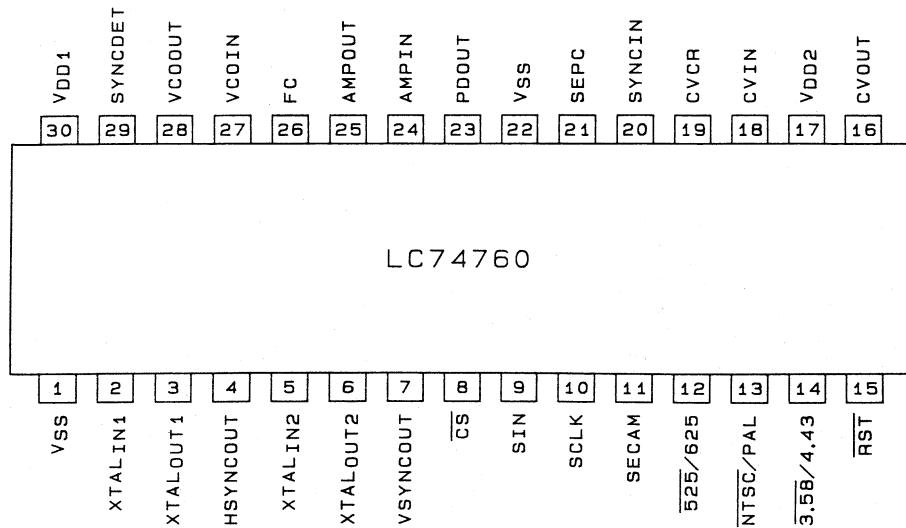


QK10 QK05-QK07  
QK11 QK01  
QK12

QK02-QK04  
QK08 QK09

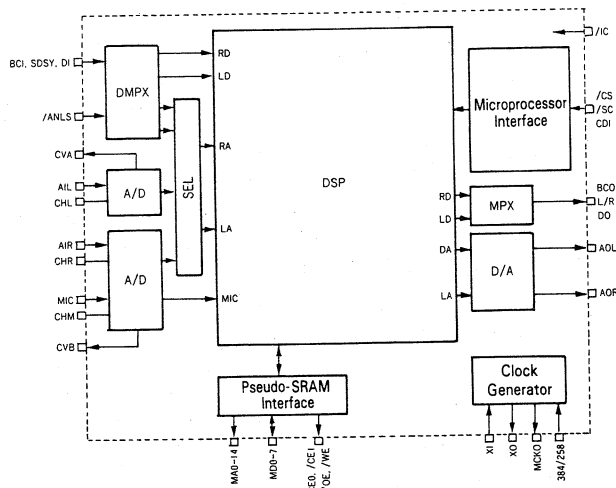
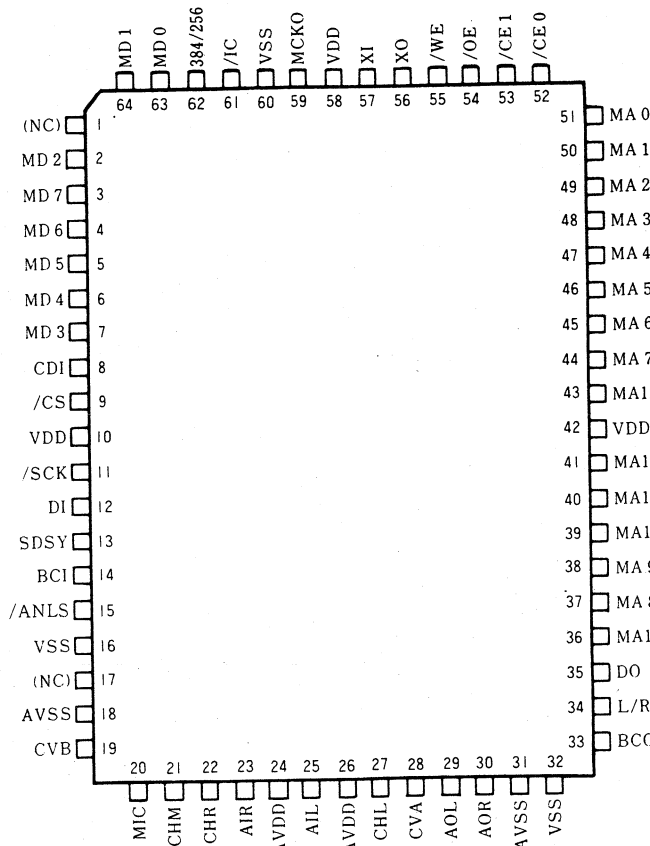
PK04







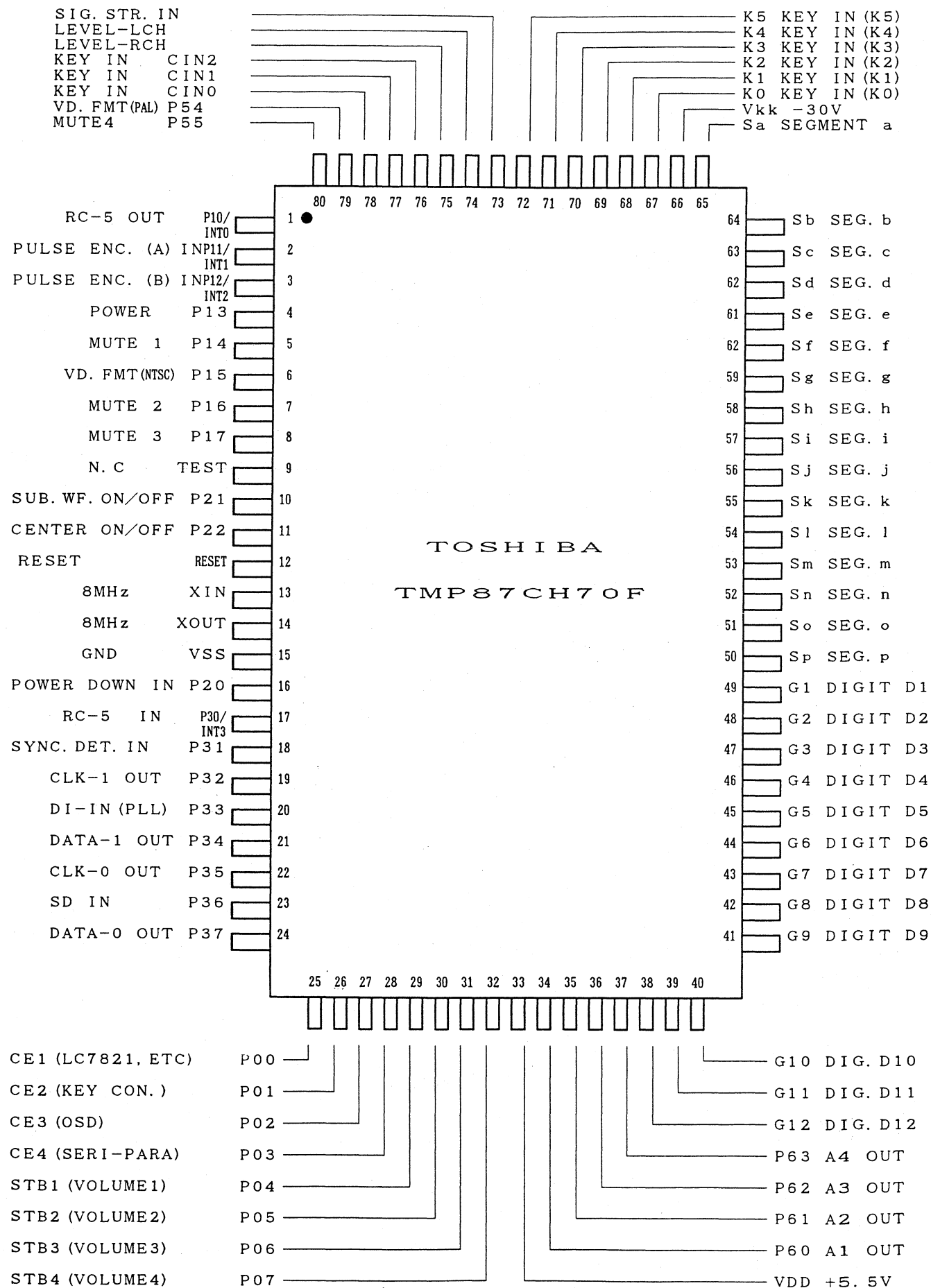
# QK01:YSS205



No.	Name	I/O	Function
1	(NC)		(Do not connect externally.)
2	MD2	I/O	External pseudo-SRAM interface data terminal
3	MD7	I/O	External pseudo-SRAM interface data terminal
4	MD6	I/O	External pseudo-SRAM interface data terminal
5	MD5	I/O	External pseudo-SRAM interface data terminal
6	MD4	I/O	External pseudo-SRAM interface data terminal
7	MD3	I/O	External pseudo-SRAM interface data terminal
8	CDI	I	Microprocessor interface serial data
9	/CS	I	Microprocessor interface chip select
10	VDD	-	+5V power supply (for digital block)
11	/SCK	I	Microprocessor interface serial clock
12	DI	I+	Digital audio signal input serial data
13	SDSY	I+	Digital audio signal input L/R clock
14	BCI	I+	Digital audio signal input bit clock
15	/ANLS	I+	YM7110 interface serial data
16	VSS	-	Ground (for digital block)
17	(NC)		(Do not connect externally.)
18	AVSS	A-	Ground (for A/D, D/A converters, Connect with VSS externally.)
19	CVB	A-	ADC center voltage for R and MIC channels
20	MIC	AI	Analog audio signal MIC channel ADC input
21	CHM	A-	Connecting terminal for MIC input sample/hold capacitor
22	CHR	A-	Connecting terminal for AIR input sample/hold capacitor
23	AIR	AI	Analog audio signal R channel ADC input
24	AVDD	A-	+5V power supply (for A/D, D/A converters, Connect with VDD externally.)
25	AIL	AI	Analog audio signal L channel ADC input
26	AVDD	A-	+5V power supply (for A/D, D/A converters, Connect with VDD externally.)
27	CHL	A-	Connecting terminal for AIR input sample/hold capacitor
28	CVA	A-	ADC center voltage for L channel
29	AOL	AO	Analog audio signal L channel DAC output
30	AOR	AO	Analog audio signal R channel DAC output
31	AVSS	A-	Ground (for A/D, C/A converters, Connect with VSS externally.)
32	VSS	-	Ground (for digital block)
33	BCO	O	Digital audio signal output bit clock
34	L/R	O	Digital audio signal output L/R clock
35	DO	O	Digital audio signal output serial data
36	MA13	O	External pseudo-SRAM interface address terminal
37	MA8	O	External pseudo-SRAM interface address terminal
38	MA9	O	External pseudo-SRAM interface address terminal
39	MA11	O	External pseudo-SRAM interface address terminal
40	MA10	O	External pseudo-SRAM interface address terminal
41	MA14	O	External pseudo-SRAM interface address terminal
42	VDD	-	GND (for digital block)
43	MA12	O	External pseudo-SRAM interface address terminal
44	MA7	O	External pseudo-SRAM interface address terminal
45	MA6	O	External pseudo-SRAM interface address terminal
46	MA5	O	External pseudo-SRAM interface address terminal
47	MA4	O	External pseudo-SRAM interface address terminal
48	MA3	O	External pseudo-SRAM interface address terminal
49	MA2	O	External pseudo-SRAM interface address terminal
50	MA1	O	External pseudo-SRAM interface address terminal
51	MA0	O	External pseudo-SRAM interface address terminal
52	/CE0	O	External pseudo-SRAM interface chip select #0
53	/CE1	O	External pseudo-SRAM interface chip select #1 (available when connecting two pseudo-SRAM)
54	/OE	O	External pseudo-SRAM interface OE terminal
55	/WE	O	External pseudo-SRAM interface WE terminal
56	XO	O	Connecting terminal for crystal oscillator
57	XI	I	Connecting terminal for crystal oscillator or external clock input terminal
58	VDD	-	+5V power supply (for digital block)
59	MCKO	-	Master clock (XI clock) output
60	VSS	-	Ground (for digital block)
61	/IC	I	Initial clear terminal
62	384/256	I+	Master clock rate switching ('H' = 384fs, 'L' = 256fs)
63	MD0	I/O	External pseudo-SRAM interface data terminal
64	MD1	I/O	External pseudo-SRAM interface data terminal

Note) +: Pulled-up terminal, A: Analog terminal

QU01:TMP87CK70



## 5. SERVICE PROGRAM

### 1. Tracking point memory

This service program can be use for measurement of the tuner circuit.

When the POWER ON, press the "PRESET +" button while pressing the "MEMO" button.  
Frequencies to be memorized are as follows.

	VERSION	P1	P2	P3	P4
FM	02B,U,K	90.0	98.0	106.0	87.5
	JAPAN	78.0	83.0	88.0	76.0

	SCAN STEP	P5	P6	P7	P8	P9	P10	P11	P12~ P30
AM	10 KHz	600.0	1000.0	1400.0	520.0	←	←	←	←
	9 KHz	603.0	999.0	1404.0	531.0	←	←	←	←
LW		↑	↑	↑	171.0	207.0	270.0	152.0	531.0

### 2. FLD segment luminous

This service program can be luminous all segments by following step.

When the POWER ON, press the "FM/AM(TUNER)" button while pressing the "MEMO" button.  
When finish the following procedure this service program should be stop.

#### Luminous procedure

1. All segments luminous 5 seconds.
2. At the grid "1G", segments luminous following procedure.

① KHz → ② MHz → ③ R → ④ PEAK → ⑤ L → ⑥ MULTI → ⑦ MONO → ⑧ MATRIX →  
⑨ HALL → ⑩ P-SCAN → ⑪ TAPE → ⑫ COPY → ⑬ VCR1 → ⑭ SLEEP → ⑮ DISP → ⑯ TX

3. At the grid "2G" to "11G", each one segment luminous step by step.
4. At the grid "12G", segments luminous following procedure.

① VISUAL → ② SIGNAL LEVEL → ③ CH → ④ SIGNAL BAR (LEFT SIDE) →  
⑤ SIGNAL BAR (2nd LEFT) → ⑥ SIGNAL BAR (CENTER) → ⑦ SIGNAL BAR (2nd RIGHT) →  
⑧ SIGNAL BAR (RIGHT SIDE) → ⑨ STEREO → ⑩ THX CINEMA → ⑪ PRO.LOGIC →  
⑫ MOVIE → ⑬ AUTO MEMO → ⑭ 3.LOGIC → ⑮ SIMUL'D → ⑯ SURROUND

### 3. Input selector and surround mode operation.

This service program can be operate input selector and surround mode in automatically as following procedure. This service program continually repeat until power off.

When the POWER ON, press the "**SURROUND MODE**" button while pressing the "**MEMO**" button.

STEP	INPUT SELECTOR	SURROUND MODE	FM MODE BAND	FREQUENCY	COPY SWITCH		NOTICE
					TAPE	VCR1	
1	FM	STEREO	AUTO	98.0	SOURCE	SOURCE	
2	FM	STEREO	MONO	LAST	↑	↑	
3	CD	THX	AUTO	LAST	↑	↑	
4	TAPE	P-LOGIC	AUTO	LAST	TUNER	SOURCE	TUNER=ON
5	DCC	MOVIE	AUTO	LAST	SOURCE	TV	
6	TV	3 CH	AUTO	LAST	↑	SOURCE	
7	TV	HALL	AUTO	LAST	CD	LD	
8	LD	MATRIX	AUTO	LAST	TAPE	VCR1	
9	VCR1	MONO	AM	1000	DCC	VCR2	
10	VCR2	STEREO	AUTO	98.0	TUNER	SOURCE	TUNER=ON
11	AUX	THX	AUTO	LAST	SOURCE	AUX	

### 4. All reset

This service program can be clear all memorized operations and functions.

When the POWER ON, press the "**CLEAR**" button while pressing the "**MEMO**" button. FLD shows "**CLEAR MEMO**" and power will be OFF.

### 5. Volume reset

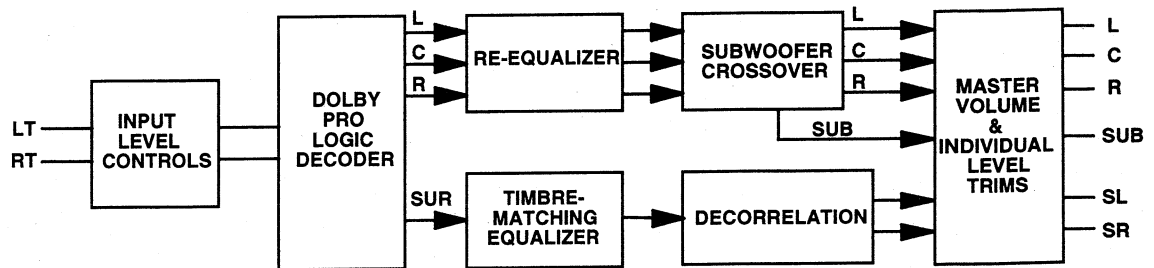
This service program can be reset "MASTER VOLUME LEVEL" and "CHANNEL OUTPUT LEVEL" to initial level. (MASTER VOLUME : -61dB, CHANNEL LEVEL : 0dB)

When the POWER ON, transmit the reset code "**163731**" continually more than 3 seconds by remote control unit(RC500AV or other multi remote controller). FLD shows "**VOL RST**".

## 6. SURROUND SOUND CONTROLLERS

### A. BASIC DESCRIPTION

This basic description gives a quick sketch of the various features required for a Home THX "Controller".



### RE-EQUALIZATION CIRCUITS

These circuits in left, center and right front channels aid in translating the correct spectrum of the program material, designed for film dubbing stage and standardized movie theater listening, to the environment of the home.

### SURROUND TIMBRE MATCHING CIRCUIT

This equalization circuit makes the perceived response of the surround channel closer to that of the front channels. It allows sounds panned from front to surround, or vice-versa, to stay more nearly alike in timbre.

### DECORRELATION

This circuitry splits the single surround output channel into left and right surround outputs. Decorrelation helps to produce an impression of spaciousness in the surround channel, which is highly desirable.

### SUBWOOFER CROSSOVER NETWORK

By splitting the frequency spectrum into subwoofer and main channels, the size of the main channel speakers is kept practical, and the high sound pressure level requirements of low frequencies are best accommodated. The network provides for high-pass filtering of the front channels along with low pass filtering of the sum of the three front channels.

## 7. ELECTRICAL ADJUSTMENT

### 1. FM MONO. Distortion Adjustment

Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to FM antenna terminal. (75 ohm)	98 MHz	500 uV/m (54 dB/m) MONO 1 KHz / Dev.40KHz 53.3% (/02B,K) MONO 1KHz / Dev. 75KHz 100% (USA)	98 MHz (P2)	L201	Distortion level <b>Minimum</b> at TAPE-OUT

### 2. FM Muting Level Adjustment

Turn the variable resistor **R212** to no indication ("TUNED") point. And return that valuable resistor in opposite to the "TUNED" indicate point.

Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to FM antenna terminal. (75 ohm)	98 MHz	6.3 uV/m (16 dB/m) MONO 1 KHz / Dev.40KHz 53.3% (/02B,K) MONO 1KHz / Dev. 75KHz 100% (USA)	98 MHz (P2)	R212	"TUNED" indicate on FLD
2			Over mentioned level +3 dB	AUTO SCAN	Only Confirm	"TUNED" indicate on FLD

### 3. FM STEREO Distortion Adjustment

Adjust the **L channel** with the RF signal modulated only **L channel** first and confirm the **R channel** with the RF signal modulated only **R channel**.

Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to FM antenna terminal. (75 ohm)	98 MHz	500 uV/m (54 dB/m) L+R 1KHz / Dev. 40KHz 53.3% PILOT 19KHz / Dev. 6KHz 8% (/02B,K)	98 MHz (P2)	IF COIL in FRONT END	Distortion level <b>Minimum</b> at TAPE-OUT
2			L+R 1KHz / Dev. 67.5KHz 90% PILOT 19KHz / Dev. 6.75KHz 9% (USA)		R218	Distortion level <b>Minimum</b> at TAPE-OUT

**REMARK:** Adjustment with **R128** is not necessary when the distortion level is less than 0.5% with adjusting IF coil.

### 4. FM STEREO Separation Adjustment

Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to FM antenna terminal. (75 ohm)	98 MHz	same specification as <b>FM STEREO distortion adjustment.</b> Input only <b>L</b> channel.	98 MHz (P2)	R211	Output level <b>Minimum</b> at TAPE-OUT channel <b>R</b>
2		98 MHz	same specification as <b>FM STEREO distortion adjustment.</b> Input only <b>R</b> channel.	98 MHz (P2)	R211	Output level <b>Similar</b> as Rch at TAPE-OUT channel <b>L</b>

### 5. AM IF Adjustment

Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to transmission *loop antenna. (*:Standard required loop)	1000 KHz (/02B,K) 999 KHz (USA)	300 uV/m (50 dB/m)	Tuning point	LA06	Output level (L or R) <b>Maximum</b> at TAPE-OUT

**REMARK:** For receiving antenna, the adapted one is available.

This adjustment is not necessary normally, because the coil LA06 is preset by the original supplier.

It is necessary when the incorrect usable sense and frequency response.

### 6. AM RF Adjustment

Step	**Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to transmission *loop antenna. (*:Standard required loop)	1400 KHz (/02B,K) 1404 KHz (USA)	Level 300 - 400 uV/m Mod. 400 Hz 30%	1400 KHz (/02B,K) 1404 KHz (USA)	CA01	Output level (L or R) <b>Maximum</b> at TAPE-OUT
2		600 KHz (/02B,K) 603 KHz (USA)	Level 300 - 400 uV/m Mod. 400 Hz 30%	600 KHz (/02B,K) 603 KHz (USA)	LA01	Output level (L or R) <b>Maximum</b> at TAPE-OUT
3	Repeat step 1 and 2 until sensitivity be maximized.					

### 7. AM auto stop Adjustment

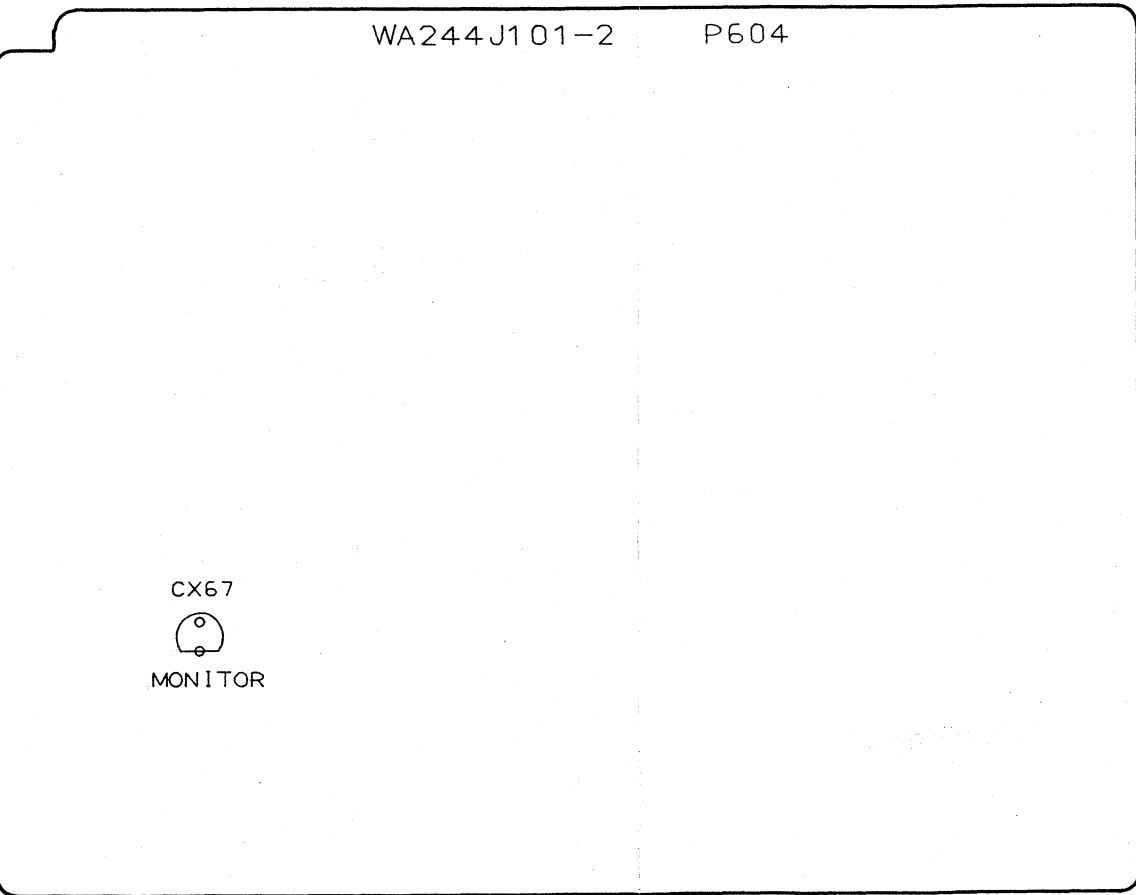
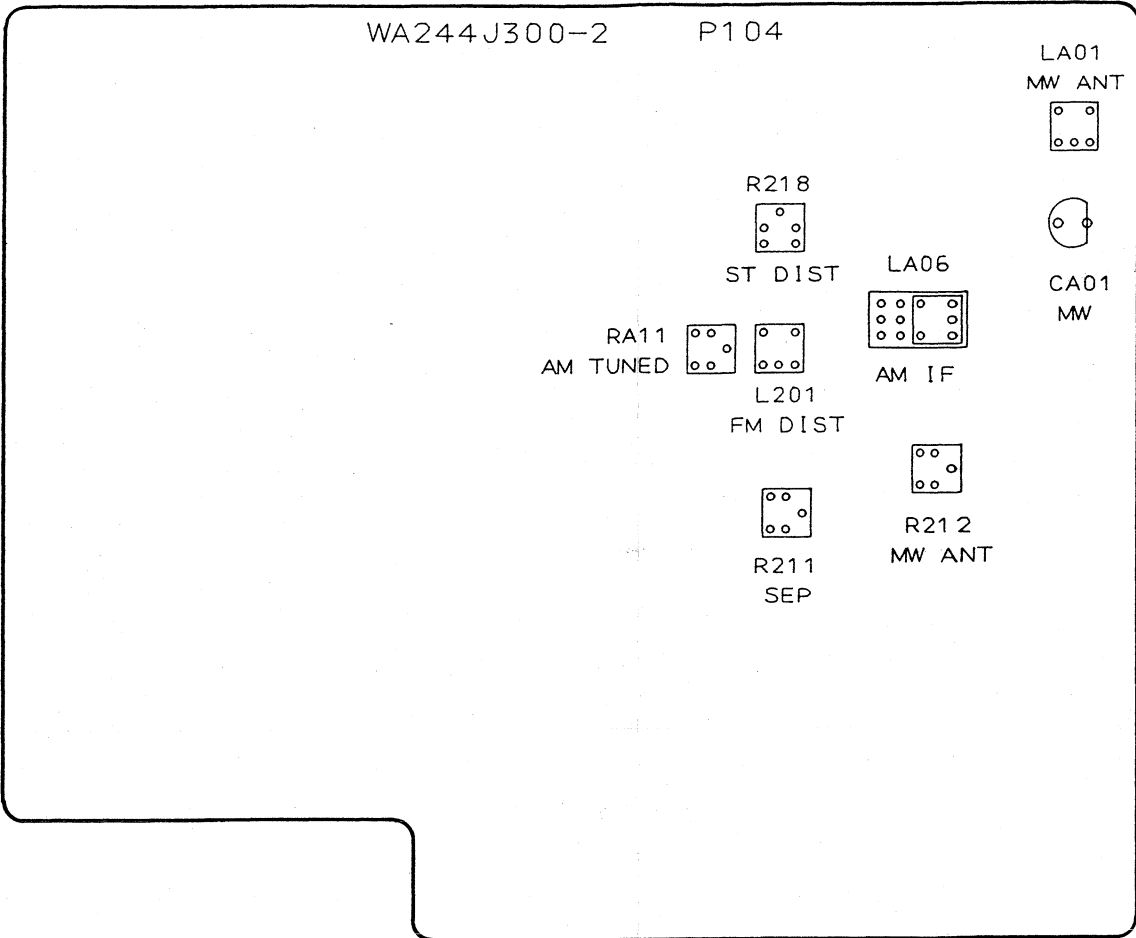
Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to transmission *loop antenna. (*:Standard required loop)	1000 KHz (/02B,K) 999 KHz (USA)	500 uV/m (54 dB/m)	1000 KHz (/02B,K) 999 KHz (USA)	RA11	"TUNED" indicate on FLD
2			1000 uV/m (60 dB/m)	AUTO SCAN	Only Confirm	"TUNED" indicate on FLD

**REMARK:** This adjustment is related to the FM muting Level Adjustment. The FM muting Level re-adjustment is necessary after this adjustment.

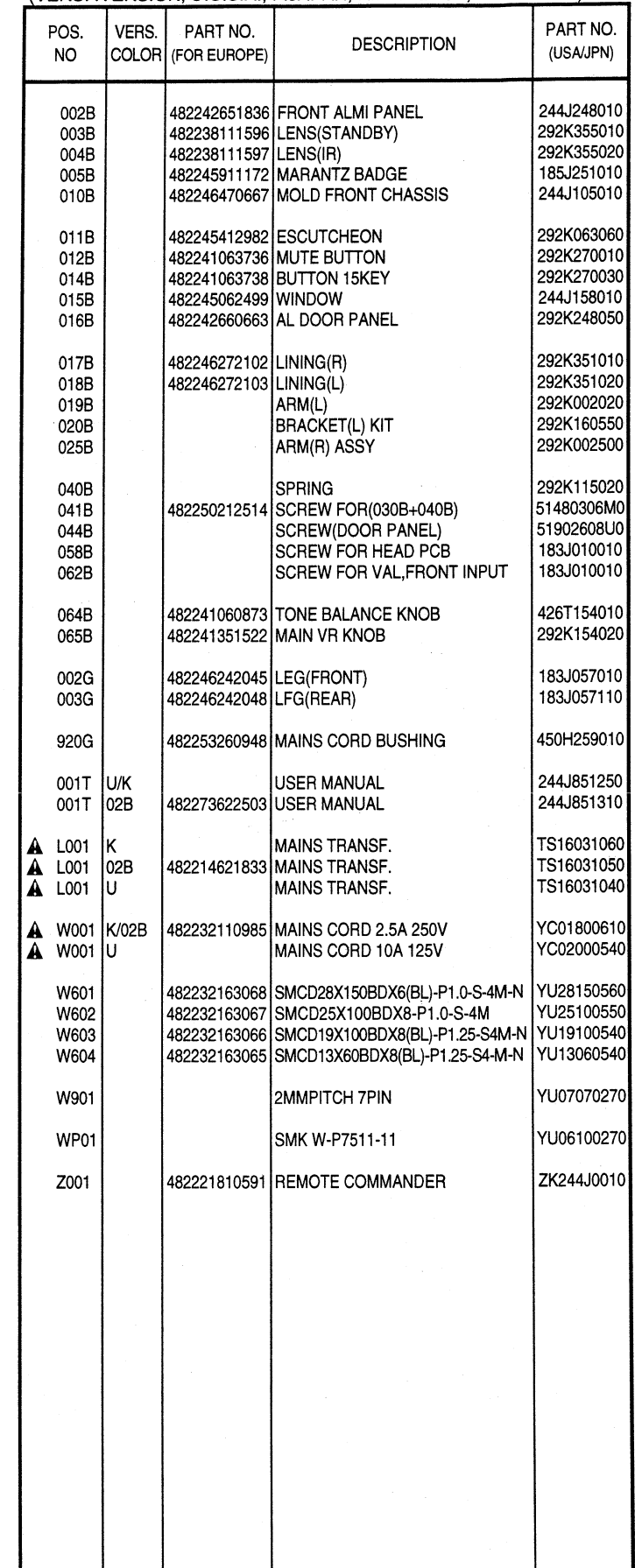
### 8. On Screen Display VCO Adjustment

Step	Input Signal Source and Connection	Measuring position	Measuring equipment	Input selector	Adjustment Point	Adjustment Value
1	Color bar or other standard video signal. Video signal generator output to LD video input.	IC QX60 26pin and GND.	DC voltmeter (Impedance > 10K ohm/V)	LD	CX67	2.9V +-0.1V

**REMARK:** Connect the TV monitor to the monitor output terminal of the product.



(VERS. :VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, \*\*:EUROPE)





## 9. ELECTRICAL PARTS LIST

### ASSIGNMENT OF COMMON PARTS CODES.

#### RESISTOR

R\*\*\* : 1) GD05 x x x 140, Carbon film fixed resistor,  $\pm 5\%$  1/4W  
 R\*\*\* : 2) GD05 x x x 160, Carbon film fixed resistor,  $\pm 5\%$  1/6W

① — Resistance value

Examples :

① Resistance value

0.1Ω...001	10Ω...100	1kΩ...102	100kΩ...104
0.5Ω...005	18Ω...180	2.7kΩ...272	680kΩ...684
1Ω...010	100Ω...101	10kΩ...103	1MΩ...105
6.8Ω...068	390Ω...391	22kΩ...223	4.7MΩ...475

(Note) Please distinguish 1/4W from 1/6W by the shape of parts used actually.

#### C\*\*\* : CERAMIC CAP.

1) DD1 x x x 370, Ceramic capacitor  
 Disc type  
 Temp.coef. P350~N1000, 50V  
 ① — Capacity value  
 ② — Tolerance

Examples

① Tolerance (Capacity deviation)

$\pm 0.25\text{pF}$  ... 0  
 $\pm 0.5\text{pF}$  ... 1  
 $\pm 5\%$  ... 5

\* Tolerance of COMMON PARTS handled here are as follows :

0.5pF~ 5pF... $\pm 0.25\text{pF}$   
 6pF~ 10pF... $\pm 0.5\text{pF}$   
 12pF~ 560pF... $\pm 5\%$

② Capacity value

0.5pF...005	3pF...030	100pF...101
1pF...010	10pF...100	220pF...221
1.5pF...015	47pF...470	560pF...561

#### C\*\*\* : CERAMIC CAP.

1) DK16 x x x 300, High dielectric constant ceramic capacitor  
 Disc type  
 Temp.chara. 2B4, 50V  
 ① — Capacity value

Examples

② Capacity value

100pF...101	1000pF...102	10000pF...103
470pF...471	2200pF...222	

#### C\*\*\* : ELECTROLY CAP. ( $\text{⏏}$ ), FILM CAP. ( $\text{⏏}$ )

1) EA x x x x x 10, Electrolytic capacitor  
 One-way lead type, Tolerance  $\pm 20\%$

① — Working voltage  
 ② — Capacity value

Examples

① Capacity value

0.1μF...104	4.7μF...475	100μF...107
0.33μF...334	10μF...106	330μF...337
1μF...105	22μF...226	1100μF...118
		2200μF...228

② Working voltage

6.3V...006	25V...025
10V...010	35V...035
16V...016	50V...050

2) DF15 x x x 350 } Plastic film capacitor  
 DF15 x x x 310 } One-way type, Mylar  $\pm 5\%$  50V  
 DF16 x x x 310 } Plastic film capacitor  
 One-way type, Mylar  $\pm 10\%$  50V

① — Capacity value

Examples

① Capacity value

0.001μF(1000pF)...102	0.1μF...104
0.0018μF...182	0.56μF...564
0.01μF...103	1μF...105
0.015μF...153	

**NOTE** : 1) The above CODES ( R\*\*\*, R\*\*\*, C\*\*\*, C\*\*\* and C\*\*\* ) are omitted on the schematic diagram in some case.

2) On the occasion, be confirmed the common parts on the parts list.

3) Refer to "Common Parts List" for the other common parts( R105, DD4, DK4 ).

### NOTE ON SAFETY FOR FUSIBLE RESISTOR :

The suppliers and their type numbers of fusible resistors are as follows :

1. KOA Corporation

Part No.	Type No.	Description
NH05 x x x 140	RF25S x x x x Ω J	( $\pm 5\%$ 1/4W )
NH05 x x x 120	RF50S x x x x Ω J	( $\pm 5\%$ 1/2W )
NH85 x x x 110	RF73B2A x x x x Ω J	( $\pm 5\%$ 1/10W )
NH95 x x x 140	RF73B2E x x x x Ω J	( $\pm 5\%$ 1/4W )

\* Resistance value (0.1-10kΩ)

2. Matsushita Electronic Components Co., Ltd

Part No.	Type No.	Description
NF05 x x x 140	ERD-2FCJ x x x	( $\pm 5\%$ 1/4W )
RF05 x x x 140		
NF02 x x x 140	ERD-2FCG x x x	( $\pm 2\%$ 1/4W )
RF02 x x x 140		

\* Resistance value

Examples :

\* Resistance value

0.1Ω...001	10Ω...100	1kΩ...102	100kΩ...104
0.5Ω...005	18Ω...180	2.7kΩ...272	680kΩ...684
1Ω...010	100Ω...101	10kΩ...103	1MΩ...105
6.8Ω...068	390Ω...391	22kΩ...223	4.7MΩ...475

### ABBREVIATION AND MARKS

1	ANT. : ANTENNA	2	BATT. : BATTERY
3	CAP. : CAPACITOR	4	CER. : CERAMIC
5	CONN. : CONNECTING	6	DIG. : DIGITAL
7	HP : HEADPHONE	8	MIC. : MICROPHONE
9	μ-PRO : MICROPROCESSOR	10	REC. : RECORDING
11	RES. : RESISTOR	12	SPK : SPEAKER
13	SW : SWITCH	14	TRANSF. : TRANSFORMER
15	TRIM. : TRIMMING	16	TRS. : TRANSISTOR
17	VAR. : VARIABLE	18	X'TAL : CRYSTAL
19		20	
21		22	
23		24	
25		26	
27		28	
29		30	

### NOTE ON SAFETY :

Symbol ▲ Fire or electrical shock hazard. Only original parts should be used to replaced any part marked with symbol ▲. Any other component substitution ( other than original type ), may increase risk of fire or electrical shock hazard.

(VERS. :VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, \*\*:EUROPE)

POS. NO	VERS. COLOR	PART NO. (FOR EUROPE)	DESCRIPTION	PART NO. (USA/JPN)
			<b>PF04-TONE, AUX INPUT CIRCUIT BOARD PF04-CAPACITORS</b>	
CF01   CF03 CF09   CF11		482212421894	ELECT CAP. 10μF 16V	EJ10601610
		532212232265	CER.CAP. 100pF J CH 50V	DD15101300
CF21   CF23 CF25   CF27		482212423056	ELECT CAP. 47μF 16V	EJ47601610
		482212423055	ELECT CAP. 22μF 16V	EJ22601610
CF29   CF31 CF43   CF46		482212231205	CER.CAP. 47pF J CH 50V	DD15470300
		482212240588	CER.CAP. 22000pF 25V	DA17223110
CF53 CF54 CF55 CF56 CF57		482212240588	CER.CAP. 22000pF 25V	DA17223110
		482212240588	CER.CAP. 22000pF 25V	DA17223110
		482212423056	ELECT CAP. 47μF 16V	EJ47601610
		482212423056	ELECT CAP. 47μF 16V	EJ47601610
		482212421894	ELECT CAP. 10μF 16V	EJ10601610
CF58 CF59 CF60 CF61 CF62		482212421894	ELECT CAP. 10μF 16V	EJ10601610
		482212233817	CER.CAP. 6.8pF 50V	DA16068120
		482212233817	CER.CAP. 6.8pF 50V	DA16068120
		482212423056	ELECT CAP. 47μF 16V	EJ47601610
		482212423056	ELECT CAP. 47μF 16V	EJ47601610
CL51 CL52 CL53 CL54		482212421894	ELECT CAP. 10μF 16V	EJ10601610
		482212423055	ELECT CAP. 22μF 16V	EJ22601610
		482212240617	CER.CAP. 0.1μF 50V +80 -20%	DD38104010
		482212240617	CER.CAP. 0.1μF 50V +80 -20%	DD38104010
CV91 CV92		482212421894	ELECT CAP. 10μF 16V	EJ10601610
		482212421894	ELECT CAP. 10μF 16V	EJ10601610
<b>C***</b>			<b>PF04-CAPACITORS (COMMON)</b> High Dielectric Constant Ceramic Capacitor, ±10% 50V: CF05-CF07	
<b>C***</b>			Electrolytic Capacitor, ±20%: CF40,CF41	
<b>C***</b>			Plastic Film Capacitor, ±5% 50V: CF13-CF15,CF17-CF19	
			<b>PF04-SEMICONDUCTORS</b>	
QF01 QF02 QF51		482220970044	NJM2058D	HC10031090
		482220983631	NJM4558DD	HC10008090
		482220970044	NJM2058D	HC10031090
			<b>PF04-RESISTORS</b>	
RF41 RF42 RF43		482210130883	VAR.RES. 100KB X 4 L=15	RG01040130
		482210130883	VAR.RES. 100KB X 4 L=15	RG01040130
		482210130884	VAR.RES. 10KB X 2 L=15	RM01030980

POS. NO	VERS. COLOR	PART NO. (FOR EUROPE)	DESCRIPTION	PART NO. (USA/JPN)
<b>R***</b>			<b>PF04-RESISTORS (COMMON)</b> Carbon Film Fixed Resistor, ±5% 1/6W RF01-RF03,RF05-RF07, RF09-RF11,RF13-RF15, RF17-RF19,RF21-RF23, RF29-RF31,RF51-RF60, RL51,RL52,RV95-RV98	
JL51 JV55		482226531298 482226541531	<b>PF04-MISCELLANEOUS</b> 3P GLD JACK S-VIDEO 1P GLD	YT02030330 YT02010900
			<b>PK04-KEY-CONT. CIRCUIT BOARD PK04-CAPACITORS</b>	
CK01 CK02 CK05 CK06 CK07		482212421894 482212421894 482212423053 482212423053 482212240588	ELECT CAP. 10μF 16V ELECT CAP. 10μF 16V ELECT CAP. 1μF 50V ELECT CAP. 1μF 50V CER.CAP. 22000pF 25V	EJ10601610 EJ10601610 EJ10505010 EJ10505010 DA17223110
CK08 CK09   CK12 CK13		482212240588 482212611127 482212240617	CER.CAP. 22000pF 25V CER.CAP. 470pF ±10% CER.CAP. 0.1μF 50V +80 -20%	DA17223110 DA16471110 DD38104010
CK14 CK15 CK16 CK17 CK18		482212240617 482212421899 482212421899 482212240588 482212480087	CER.CAP. 0.1μF 50V +80 -20% ELECT CAP. 4.7μF 25V ELECT CAP. 4.7μF 25V CER.CAP. 22000pF ELECT CAP. 220μF 6.3V	DD38104010 EJ47502510 EJ47502510 DA17223110 EJ22700610
CK19 CK20 CK21 CK22 CK23		482212240588 482212480087 482212611069 482212611069 482212240588	CER.CAP. 22000pF ELECT CAP. 220μF 6.3V CER.CAP. 150pF 50V CER.CAP. 150pF 50V CER.CAP. 22000pF 25V	DA17223110 EJ22700610 DA16151110 DA16151110 DA17223110
CK24 CK27 CK28 CK33 CK34		482212240588 482212240588 482212240588 482212421894 482212421894	CER.CAP. 22000pF 25V CER.CAP. 22000pF 25V CER.CAP. 22000pF 25V ELECT CAP. 10μF 16V ELECT CAP. 10μF 16V	DA17223110 DA17223110 DA17223110 EJ10601610 EJ10601610
CK39 CK40 CK41 CK42 CK43		482212240588 482212240588 482212480087 482212440786 482212240588	CER.CAP. 22000pF 25V CER.CAP. 22000pF 25V ELECT CAP. 220μF 6.3V ELECT CAP. 2.2μF 50V CER.CAP. 22000pF 25V	DA17223110 DA17223110 EJ22700610 EJ22505010 DA17223110
CK44 CK45 CK46 CK51 CK52		482212240588 482212423052 482212423052 482212421894 482212421894	CER.CAP. 22000pF 25V ELECT CAP. 100μF 16V ELECT CAP. 100μF 16V ELECT CAP. 10μF 16V ELECT CAP. 10μF 16V	DA17223110 EJ10701610 EJ10701610 EJ10601610 EJ10601610
CK53 CK54 CK61 CK62 CK63		482212423052 482212423052 482212421894 482212421894 482212240588	ELECT CAP. 100μF 16V ELECT CAP. 100μF 16V ELECT CAP. 10μF 16V ELECT CAP. 10μF 16V CER.CAP. 22000pF 25V	EJ10701610 EJ10701610 EJ10601610 EJ10601610 DA17223110

POS. NO	VERS. COLOR	PART NO. (FOR EUROPE)	DESCRIPTION	PART NO. (USA/JPN)
CK64 CK71 CK72 CK81 CK82		482212240588 482212230045 482212230045 482212480087 482212240588	CER.CAP. 22000pF 25V CER.CAP. 27pF J CH 50V CER.CAP. 27pF J CH 50V ELECT CAP. 220μF 6.3V CER.CAP. 22000pF 25V	DA17223110 DD15270300 DD15270300 EJ22700610 DA17223110
CK84 CK86 CK87 CK88 CK89		482212240588 482212480087 482212240588 482212240588 482212421982	CER.CAP. 22000pF 25V ELECT CAP. 220μF 6.3V CER.CAP. 22000pF 25V CER.CAP. 22000pF 25V ELECT CAP. 3.3μF 50V	DA17223110 EJ22700610 DA17223110 DA17223110 EJ33505010
CK91 CK92 CK94 CK95 CK96		482212480087 482212240588 482212480087 482212421894 482212421894	ELECT CAP. 220μF 6.3V CER.CAP. 22000pF 25V ELECT CAP. 220μF 6.3V ELECT CAP. 10μF 16V ELECT CAP. 10μF 16V	EJ22700610 DA17223110 EJ22700610 EJ10601610 EJ10601610
CK97 CK98		482212440786 482212240588	ELECT CAP. 2.2μF 50V CER.CAP. 22000pF 25V	EJ22505010 DA17223110
C***			<b>PK04-CAPACITORS (COMMON)</b> High Dielectric Constant Ceramic Capacitor, ± 10% 50V: CK03, CK04, CK29, CK30, CK55-CK60	
C***			Plastic Film Capacitor, ± 5% 50V: CK25, CK26	
DK01 DK02 DK06 DK51		482213032362 482213032362 482213031554 482213032362	DIODE 1SS176, MA165, 1SS254 DIODE 1SS176, MA165, 1SS254 ZENER DIODE 4.3V DIODE 1SS176, MA165, 1SS254	HD20002000 HD20002000 HD30431000 HD20002000
QK01 QK02 QK03   QK06		482220931485 482220990534 482220983631	YSS205 LC78835KM NJM4558DD	HC10003640 HC10341030 HC10008090
QK07 QK08 QK09 QK10 QK11		482220931489 482220983631 482220983631 482213063211 482213061189	LC33832S-10 NJM4558DD NJM4558DD DIG.TRS. DTA114TS DIG.TRS. DTC114TS	HC10351030 HC10008090 HC10008090 BA10003210 BA20017210
QK12		482220990531	AD1877	HC10005840
RK13 ▲ RK50 RK86		482211190967 482211190967 482211190967	<b>PK04-RESISTORS</b> FUSE RES. 4.7 Ω J 1/4W FUSE RES. 4.7 Ω J 1/4W FUSE RES. 4.7 Ω ± 5% 1/4W	NF05047140 NF05047140 NF05047140
R***			<b>PK04-RESISTORS (COMMON)</b> Carbon Film Fixed Resistor, ± 5% 1/6W RK01-RK12, RK14, RK23-RK32, RK35, RK36, RK51-RK64, RK67-RK69, RK71, RK81, RK84, RK85	
LK01 LK02 LK11   LK13		482215370065 482215370065 482224273843	<b>PK04-MISCELLANEOUS</b> L.P.F. 13.3KHz L.P.F. 13.3KHz DSS306-91-F-223Z	FF30013010 FF30013010 FM12223010

POS. NO	VERS. COLOR	PART NO. (FOR EUROPE)	DESCRIPTION	PART NO. (USA/JPN)
CG75		482212421894	ELECT CAP. 10μF 16V	EJ10601610
CG76		482212421894	ELECT CAP. 10μF 16V	EJ10601610
CG79		482212421894	ELECT CAP. 10μF 16V	EJ10601610
CG80		482212421894	ELECT CAP. 10μF 16V	EJ10601610
CG81		482212423052	ELECT CAP. 100μF 16V	EJ10701610
CG82		482212423052	ELECT CAP. 100μF 16V	EJ10701610
CG87		482212421894	ELECT CAP. 10μF 16V	EJ10601610
CG90		482212421894	ELECT CAP. 10μF 16V	EJ10601610
CG91		482212421894	ELECT CAP. 10μF 16V	EJ10601610
CG93		482212421894	ELECT CAP. 10μF 16V	EJ10601610
CG95		482212421894	ELECT CAP. 10μF 16V	EJ10601610
CG99		482212421894	ELECT CAP. 10μF 16V	EJ10601610
CS01   CS12 CS13   CS18		482212421899	ELECT CAP. 4.7μF 25V	EJ47502510
		482212230043	CER.CAP. 0.01μF Z 50V	DK18103310
CS19		482212421899	ELECT CAP. 4.7μF 25V	EJ47502510
CS20		482212421899	ELECT CAP. 4.7μF 25V	EJ47502510
CS21		482212230043	CER.CAP. 0.01μF Z 50V	DK18103310
CS22		482212230043	CER.CAP. 0.01μF Z 50V	DK18103310
CS23		482212240588	CER.CAP. 22000pF 25V	DA17223110
CS26		482212423052	ELECT CAP. 100μF 16V	EJ10701610
CS27		482212423052	ELECT CAP. 100μF 16V	EJ10701610
CS29   CS32		482212421894	ELECT CAP. 10μF 16V	EJ10601610
CS51   CS54 CS57   CS60		482212421899	ELECT CAP. 4.7μF 25V	EJ47502510
		482212421899	ELECT CAP. 4.7μF 25V	EJ47502510
CS71   CS74 CS81   CS83		482212240617	CER.CAP. 0.1μF 50V	DD38104010
		482212421899	ELECT CAP. 4.7μF 25V	EJ47502510
CS84		482212230043	CER.CAP. 0.01μF Z 50V	DK18103310
CS85		482212230043	CER.CAP. 0.01μF Z 50V	DK18103310
CS86   CS89		482212423052	ELECT CAP. 100μF 16V	EJ10701610
<b>C***</b>			<b>PS04-CAPACITORS (COMMON)</b> High Dielectric Constant Ceramic Capacitor, ±10% 50V: CG03,CG04,CG11-CG14, CG41-CG44,CG47,CG48, CG77,CG78,(CS61-CS70[02B]), (CS77-CS80[02B]), (CS90-CS99[02B])	

(VERS. :VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, \*\*:EUROPE)

POS. NO	VERS. COLOR	PART NO. (FOR EUROPE)	DESCRIPTION	PART NO. (USA/JPN)	POS. NO	VERS. COLOR	PART NO. (FOR EUROPE)	DESCRIPTION	PART NO. (USA/JPN)
QS21		482220970044	NJM2058D	HC10031090	QU01		482220990537	TMP87CK70	HU244JT000
QS22		482220983631	NJM4558DD	HC10008090	QU02		482213063211	DTA114TS	BA10003210
QS51		482220970044	NJM2058D	HC10031090	QU03		482213042682	DTA144ES/UN4113	BA10002000
QS52		482220970044	NJM2058D	HC10031090	QU04		482213042594	DTC144ES/UN4213	BA20002000
QS53		482220983631	NJM4558DD	HC10008090	QU05		482213060766	DTA114ES/UN4111	BA10001000
QS55		482213061892	TRS. 2SD2144S	HT421442A0	QU07		482213042682	DTA144ES/UN4113	BA10002000
QS56		482213061892	TRS. 2SD2144S	HT421442A0	QU08		482213042594	DTC144ES/UN4213	BA20002000
QS57		482213060766	DTA114ES/UN4111	BA10001000	I				
QS58		482213060588	DTC114ES/UN4211	BA20001000	QU10		482220932445	74HC123	HC712300B0
					QU11				
R***			<b>PS04-RESISTORS (COMMON)</b> Carbon Film Fixed Resistor, ±5% 1/6W RD01-RD05,RD07-RD11, RD13-RD16,RD19-RD23, RD51-RD58,RD61-RD64, RD71,RD72,RG01-RG16, RG19-RG26,RG31-RG46, RG49-RG56,RG61-RG76, RG79-RG82,RG85,RG87, RG89,RG91-RG97,RG99, RS01-RS42,RS45-RS79, RS81-RS83,RS85-RS88, RS91-RS98,RU91		QU12		482213060588	DTC114ES	BA20001000
					QU13		482213042594	DTC144ES/UN4213	BA20002000
			<b>PS04-MISCELLANEOUS</b> SLW25S-1C7 1.00MFFC 19P FFC 9603S-19C	YJ06020250 YJ07008840	R***			<b>PU04-RESISTORS (COMMON)</b> Carbon Film Fixed Resistor, ±5% 1/6W RU01-RU09,RU11,RU12, RU15-RU31	
JG01		482226731953	SBRL7S-4 2MM PITCH 7P	YJ06011670	FL01		482213091499	FIP12DM8R 12DIGIT 16SEG	HQ31206060
JG02		482226551389			JU01		482226760416	SLW28R-1C7 28P	YJ06020580
JP21		482226750956			SU01		482227620508	TACT SW	SP01011280
JS03		482229061244	RCA 6P(W/R-AU)	YT02060490	I				
JS04		482229061244	RCA 6P(W/R-AU)	YT02060490	SU14		482227620508	TACT SW	SP01011280
JS51		482229061244	RCA 6P(W/R-AU)	YT02060490	SU16				
JS52		482229061244	RCA 6P(W/R-AU)	YT02060490	SU21		482227620508	TACT SW	SP01011280
					I				
JU90		482226520724	RC-5 2P GOLD	YT02021310	SU25		482227620508	TACT SW	SP01011280
			<b>PU04-FRONT CIRCUIT BOARD</b> <b>PU04-CAPACITORS</b> CER.CAP. 22000pF 25V ELECT CAP. 47μF 10V ELECT CAP. 220μF 6.3V CER.CAP. 22000pF 25V CER.CAP. 0.1μF 50V +80 -20%	DA17223110 EJ47601010 EJ22700610 DA17223110 DD38104010	SU28				
CU01		482212240588			SU30		482227620508	TACT SW	SP01011280
CU02		482212423056			I				
CU03		482212480087			SU33				
CU04		482212240588			XU01		482224272066	RESONATOR CST 8.00MHz	FQ08004010
CU05		482212240617						<b>PU54-ROTARY ENCODER</b> <b>CIRCUIT BOARD</b> <b>PU54-SEMICONDUCTORS</b> TRS. 2SC536SP/ETC TRS. 2SC536SP/ETC	HT30001000 HT30001000
CU07		482212490406	BIG ELECT CAP. 0.022μF 16V	EX22300530	QU51		482213042298		
CU08		482212423053	ELECT CAP. 1μF 50V	EJ10505010	QU52		482213042298		
CU09								<b>PU54-MISCELLANEOUS</b> EC16B ROTARY ENCODER	SR02010040
I		482212240588	CER.CAP. 0.022μF	DA17223110	SU55		482227310296		
CU12								<b>PU64-ROTARY ENCODER SUB</b> <b>CIRCUIT BOARD</b> <b>PU64-CAPACITORS</b> CER.CAP. 100pF 50V CER.CAP. 100pF 50V	DA16101110 DA16101110
DU01		482213080326	L.E.D. LT3D8B RED 30	HI10062320	CU51		482212610364		
DU02					CU52		482212610364		
I		482213032362	DIODE 1SS176,MA165,1SS254	HD20002000				<b>PU64-RESISTORS</b> RES. 1Ω ±5% 1/4W	GG05010140
DU05								<b>PU64-RESISTORS (COMMON)</b> Carbon Film Fixed Resistor, ±5% 1/6W RU51-RU54	
DU07		482213032362	DIODE 1SS176,MA165,1SS254	HD20002000	RU57		482211710158		
I					R***				
DU14								<b>PU64-MISCELLANEOUS</b> TACT SW	SP01011280
DU16		482213032362	DIODE 1SS176,MA165,1SS254	HD20002000	SU51		482227620508		
I									
DU20	02B	482213032362	DIODE 1SS176,MA165,1SS254	HD20002000					
DU33									

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POS. NO	VERS. COLOR	PART NO. (FOR EUROPE)	DESCRIPTION	PART NO. (USA/JPN)
QU06		482213083887	<b>PU74-IR SENSOR CIRCUIT BOARD</b> <b>PU74-SEMICONDUCTORS</b> IR SENSOR RPM674CBR-S	HW10002210
			<b>PW54-HEAD PHONE CIRCUIT BOARD</b>	
			<b>PW54-CAPACITORS</b> CER.CAP. 0.022μF	DA17223110
CW53 CW54	02B 02B	482212240588 482212240588	CER.CAP. 0.022μF	DA17223110
<b>C***</b>			<b>PW54-CAPACITOR (COMMON)</b> High Dielectric Constant Ceramic Capacitor, ± 10% 50V: CW55[02B]	
DW51		482213082421	<b>PW54-SEMICONDUCTORS</b> DIODE 1D3 1A/200V	HD20002710
▲ RW51 ▲ RW52		482205210479 482205210479	<b>PW54-RESISTORS</b> RES. 47 Ω ± 5% 1/6W RES. 47 Ω ± 5% 1/6W	GG05470160 GG05470160
JW52		482226731894	<b>PW54-MISCELLANEOUS</b> PHONE JACKS BLK	YJ01004010
LW51		482228020501	MR62-24SR 24V RELAY	LY20240410
			<b>P104-TUNER,SUB WOOFER CIRCUIT BOARD</b> <b>P104-CAPACITORS</b>	
C201 C202 C203 C204 C205		482212240586 482212240586 482212240306 482212423053 482212240306	CER.CAP. 10000pF CER.CAP. 10000pF CER.CAP. 0.047μF P 50V ELECT CAP. 1μF M 50V CER.CAP. 0.047μF P 50V	DA17103110 DA17103110 DK18473310 EJ10505010 DK18473310
C206 C208 C209 C210 C211		482212421894 482212240306 482212423053 482212240586 482212423053	ELECT CAP. 10μF 16V CER.CAP. 0.047μF P 50V ELECT CAP. 1μF 50V CER.CAP. 10000pF ELECT CAP. 1μF 50V	EJ10601610 DK18473310 EJ10505010 DA17103110 EJ10505010
C212 C213 C214 C215 C218		482212423053 482212423054 482212423056 482212240306 482212240586	ELECT CAP. 1μF 50V ELECT CAP. 0.47μF 50V ELECT CAP. 47μF 10V CER.CAP. 0.047μF P 50V CER.CAP. 0.01μF M 16V	EJ10505010 EJ47405010 EJ47601010 DK18473310 DA17103110
C219 C223 C224 C225 C226		482212421894 482212240586 482212231205 482212240586 482212240586	ELECT CAP. 10μF 16V CER.CAP. 10000pF CER.CAP. 47 pF J 50V CER.CAP. 0.01μF M 16V CER.CAP. 0.01μF M 16V	EJ10601610 DA17103110 DD15470300 DA17103110 DA17103110
C228 C229 C230 C231		482212231205 482212231205 482212240586 482212240586	CER.CAP. 47 pF J 50V CER.CAP. 47 pF J 50V CER.CAP. 0.01μF Z 16V CER.CAP. 0.01μF Z 16V	DD15470300 DD15470300 DA17103110 DA17103110
C303 C304 C305 C306 C307	K/02B	482212421894 482212421894 482212421899 482212421899 482212421899	ELECT CAP. 10μF 16V ELECT CAP. 10μF 16V ELECT CAP. 4.7μF 25V ELECT CAP. 4.7μF 25V ELECT CAP. 4.7μF 25V	EJ10601610 EJ10601610 EJ47502510 EJ47502510 EJ47502510

POS. NO	VERS. COLOR	PART NO. (FOR EUROPE)	DESCRIPTION	PART NO. (USA/JPN)
C308 C311 C312	K/02B K/02B K/02B	482212421899 482212240586 482212240586	ELECT CAP. 4.7μF 25V CER.CAP. 0.01μF M 16V CER.CAP. 0.01μF M 16V	EJ47502510 DA17103110 DA17103110
C501 C502 C503 C504 C505		482212231205 482212231205 482212240586 482212423053	CER.CAP. 47pF J CH 50V CER.CAP. 47pF J CH 50V ELECT CAP. 100μF M 10V CER.CAP. 10000pF ELECT CAP. 1μF 50V	DD15470300 DD15470300 EA10701020 DA17103110 EJ10505010
C506 C507 C511		482212441604 482212240586 482212240586	ELECT CAP. 0.1μF 50V CER.CAP. 10000pF CER.CAP. 10000pF	EJ10405010 DA17103110 DA17103110
CA01 CA02 CA03 CA04 CA05		482212560185 482212240306 482212231823 532212154128 482212231205	TRIM.CAP. 12pF CER.CAP. 0.047μF P 50V CER.CAP. 15pF J CH 50V FILM CAP. 390pF J 50V CER.CAP. 47pF J CH 50V	CT12000200 DK18473310 DD15150300 DF55391090 DD15470300
CA06 CA07 CA08 CA09 CA11		482212240586 482212240586 482212560185 482212231823 482212231349	CER.CAP. 10000pF CER.CAP. 10000pF TRIM.CAP. 12pF CER.CAP. 15pF J CH 50V CER.CAP. 68pF J CH 50V	DA17103110 DA17103110 CT12000200 DD15150300 DD15680300
CA12 CA13 CA14 CA18	02B 02B 02B 02B	482212210367 482212240586 482212240586 482212421899	CER.CAP. 150pF J CH 50V CER.CAP. 10000pF CER.CAP. 10000pF ELECT CAP. 4.7μF M 25V	DD15151300 DA17103110 DA17103110 EJ47502510
CE01   CE03 CE13   CE15		482212421894	ELECT CAP. 10μF 16V	EJ10601610
CE31   CE46 CE67   CE69		482212240586	ELECT CAP. 10μF 16V	EJ10601610
CV41   CV48 CV51   CV54		482212421894	ELECT CAP. 10μF 16V	EJ10601610
CV56 CV58 CV60 CV61   CV63		482212423056 482212423056 482212423056 482212240586	ELECT CAP. 47μF M 10V ELECT CAP. 47μF M 10V ELECT CAP. 47μF 10V CER.CAP. 0.01μF M 16V	EJ47601010 EJ47601010 EJ47601010 DA17103110
CV64   CV66 CV68 CV69 CV70		482212240617 482212240617 482212421894 482212421894	CER.CAP. 0.1μF 50V +80 -20% CER.CAP. 0.1μF 50V ELECT CAP. 10μF M 16V ELECT CAP. 10μF M 16V	DD38104010 DD38104010 EJ10601610 EJ10601610

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POS. NO	VERS. COLOR	PART NO. (FOR EUROPE)	DESCRIPTION	PART NO. (USA/JPN)
<b>C***</b>			<b>P104-CAPACITORS (COMMON)</b> High Dielectric Constant Ceramic Capacitor, $\pm 10\%$ 50V: C217[K/02B], C220, C222, C227[U], C509, C510	
<b>C***</b>			Electrolytic Capacitor, $\pm 20\%$ : C207, C216, C508, CE47, CE48	
<b>C***</b>			Plastic Film Capacitor, $\pm 5\%$ 50V: C217[U], C301, C302, (C309-C310[K]), CE05-CE07, CE09-CE11, CE51-CE53, CE55-CE57, CE59-CE61, CE63-CE65	
			<b>P104-SEMICONDUCTORS</b>	
D201		482213032362	DIODE 1SS176, MA165, 1SS254	HD20002000
D202		482213080318	ZENER DIODE 6.6V	HD30681000
D501		482213080317	ZENER DIODE 5.1V	HD30511000
DA01	02B	482212550416	SVC342-L	HD40009030
DA02	02B	482213033697	DIODE 1SS135	HD20017210
DA03	02B	482212550416	SVC342-L	HD40009030
DA04	02B	482213033697	DIODE 1SS135	HD20017210
DA05	02B	482213032362	DIODE 1SS176, MA165, 1SS254	HD20002000
DA06		482213032362	DIODE 1SS176, MA165, 1SS254	HD20002000
Q201		482220990535	LA1836	HC10342030
Q202		482213062294	TRS. 2SC1809S P	HT318091P0
Q203		482213060766	DTA114ES	BA10007210
Q204		482213042594	DTC144ES/UN4213	BA20002000
Q301	K/02B	482220983631	NJM4558DD	HC10008090
Q501		482220930178	LC7218	HC10221030
Q502		482213042121	FET 2SK30AY1	HF200300B0
Q503		482213042298	TRS. 2SC536SP/ETC	HT30001000
QA01	02B	482213042298	C536SP, C2458, C3311, C1740S	HT30001000
QA02	02B	482213042298	C536SP, C2458, C3311, C1740S	HT30001000
QA03	02B	482213061892	TRS. 2SD2144S/U/V	HT421442A0
QA04	02B	482213042682	DTA144ES/UN4113	BA10002000
QA05	02B	482213042682	DTA144ES/UN4113	BA10002000
QE01		482220970044	NJM2058D	HC10031090
QE03				
QE04		482220983631	NJM4558DD	HC10008090
QE06				
QE07		482220962784	TC9215P	HC10262050
QE08		482220973275	TC9214P	HC10209050
QV51		482220931538	LC7824	HC10275030
QV54				
QV55		482220932513	MC14576	HC10046170
QV57				

POS. NO	VERS. COLOR	PART NO. (FOR EUROPE)	DESCRIPTION	PART NO. (USA/JPN)
<b>R***</b>			<b>P104-RESISTORS</b> RES. 180 $\Omega$ J 1/4W TRIM.RES. 22K $\Omega$ TRIM.RES. 4.7K $\Omega$ B RES. 220 $\Omega$ 1/6W TRIM.RES. 10K $\Omega$ B	GG05181140 RA02230780 RA04720780 GG05221160 RA01030780
R207		482205021801	RES. 180 $\Omega$ J 1/4W	GG05181140
R211		482210011352	TRIM.RES. 22K $\Omega$	RA02230780
R212		482210011373	TRIM.RES. 4.7K $\Omega$ B	RA04720780
R217		482205210221	RES. 220 $\Omega$ 1/6W	GG05221160
R218		482210011351	TRIM.RES. 10K $\Omega$ B	RA01030780
R313	K/02B	482205210221	RES. 220 $\Omega$ $\pm 5\%$ 1/6W	GG05221160
R314	K/02B	482205210221	RES. 220 $\Omega$ $\pm 5\%$ 1/6W	GG05221160
R512		482205022701	RES. 270 $\Omega$ $\pm 5\%$ 1/2W	GG05271120
R514		482205210479	RES. 47 $\Omega$ J 1/6W	GG05470160
RA11		482210011352	TRIM.RES. 22K $\Omega$ B	RA02230780
<b>R***</b>			<b>P104-RESISTORS (COMMON)</b> Carbon Film Fixed Resistor, $\pm 5\%$ 1/6W R202-R206, R208-R210, R213-R216, (R301-R306[K/02B]), (R309-R310[K/02B]), R311, R312, R501-R504, R506-R508, R510, R511, R513, R515-R517, RA01, RA02, (RA03-RA04[02B]), (RA06-RA09[02B]), RE01-RE09, RE11-RE13, RE15-RE17, RE19-RE21, RE23-RE25, RE41-RE43, RE51-RE53, RE55-RE61, RE63-RE65, RE67-RE69, RE71-RE73, RE75-RE77, RE79-RE81, RE83-RE85, RE87-RE89, RE91-RE93, RE95-RE97, RV51-RV80	
A101	K/U		<b>P104-MISCELLANEOUS</b> FM FRONT END FE341-A01	AV01202250
A101	02B	482221010658	FM FRONT END FE418-G01	AV01203010
F201	K/02B	482224270665	CER.FILTER SFE10.7MS3-A	FF11070620
F201	U	482224270911	CER.FILTER SFF10.7MA8-A	FF11070610
F202		482224270665	CER.FILTER SFE10.7MS	FF11070620
FA01	U	482224281262	CER.FILTER SFP450 F	FF10045390
J101	K/02B	482229081632	FM/AM ANT TERM.	YT03030020
J101	U	482229081537	FM/AM ANT TERM.	YT01030080
J601		482226731954	13P FFC CONN. 9603S-13C	YJ07008780
J602		482226551389	19P FFC CONN. 9603S-19C	YJ07008840
JV51		482226520725	2P S-TYPE TERMINAL	YT02021320
JV52		482226520725	2P S-TYPE TERMINAL	YT02021320
JV53		482226531302	3P S-TYPE TERMINAL	YT02030350
L201		482215763904	FM DET COIL, M292BEAS-5968Z	LI70376010
L301		482215771731	LPF-V10-A1 19.38KHz	LS10293020
L302		482215771731	LPF-V10-A1 19.38KHz	LS10293020
L501		482215770813	CHOKE COIL 47 $\mu$ H	LC14733800
L504				

(VERS.:VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, \*\*:EUROPE)

VERS. : VERSION, U.S.A., JAPAN, R.F.A. EAST, ** (ENGLISH)											
POS. NO	VERS. COLOR	PART NO. (FOR EUROPE)	DESCRIPTION	PART NO. (USA/JPN)	POS. NO	VERS. COLOR	PART NO. (FOR EUROPE)	DESCRIPTION	PART NO. (USA/JPN)		
LA01	02B	482215763084	MW ANT COIL 280μH	LA10295170	CL06		482212421894	ELECT CAP. 10μF 16V	EJ10601610		
LA02		482215770779	MW OSC COIL	LO70013010	CL09		482212423055	ELECT CAP. 22μF 16V	EJ22601610		
LA03		482215752714	LW ANT COIL	LA10295160	CL10		482212421894	ELECT CAP. 10μF 16V	EJ10601610		
LA04		482215770781	LW OSC COIL	LO70013020	CL14		482212240617	CER.CAP. 0.1μF 50V +80 -20%	DD38104010		
LA05		482215753589	CHOKE COIL 39mH J	LC23960710	CL15		482212240617	CER.CAP. 0.1μF 50V +80 -20%	DD38104010		
LA06	K/02B U	482224271509	SFL450J3 CER.FICTER	FF10045330	CL16		482212240588	CER.CAP. 22000pF 25V	DA17223110		
LA06		482214881095	AM IFT K7-H5	LI70033510	CL17		482212240588	CER.CAP. 22000pF 25V	DA17223110		
S301	K	482227721712	SLIDE SW SSSS92	SS02021470	CL18		482212423052	ELECT CAP. 100μF M 16V	EJ10701610		
SE51		482227721718	SLIDE SW SSSS9-23Z	SS02030560	CL19		482212423052	ELECT CAP. 100μF M 16V	EJ10701610		
X201		482224281248	RESONATOR CSB456F15	FQ04563020	CM01	482212421894	ELECT CAP. 10μF 16V	EJ10601610			
X501		482224272333	X'TAL AD0618CTB 7.2MHz	JX07001260	CM02	482212421894	ELECT CAP. 10μF 16V	EJ10601610			
	CM03				482212423055	ELECT CAP. 22μF 16V	EJ22601610				
<b>P604-THX/DOLBY CIRCUIT BOARD P604-CAPACITORS</b>				CM05				482212421894	ELECT CAP. 10μF 16V	EJ10601610	
C612	482212421894	ELECT CAP. 10μF 16V	EJ10601610	CM19							
C617	482212421894	ELECT CAP. 10μF 16V	EJ10601610	CM21							
C618	482212423055	ELECT CAP. 22μF 16V	EJ22601610	CM23							
C619	482212421894	ELECT CAP. 10μF 16V	EJ10601610	CM26	482212240588	CER.CAP. 22000pF 25V	DA17223110				
C621	482212421894	ELECT CAP. 10μF 16V	EJ10601610	CM27							
C622	482212421894	ELECT CAP. 10μF 16V	EJ10601610	CM51	482212240617	CER.CAP. 0.1μF 50V +80 -20%	DD38104010				
C624	482212421894	ELECT CAP. 10μF 16V	EJ10601610	CM58				482212421894	ELECT CAP. 10μF 16V	EJ10601610	
C625	482212421894	ELECT CAP. 10μF 16V	EJ10601610	CM59				482212240588	CER.CAP. 22000pF 25V	DA17223110	
C636	482212421899	ELECT CAP. 4.7μF 25V	EJ47502510	CM60				482212240588	CER.CAP. 22000pF 25V	DA17223110	
C637	482212421899	ELECT CAP. 4.7μF 25V	EJ47502510	CM62	482212240588	CER.CAP. 22000pF 25V	DA17223110				
C640	482212421894	ELECT CAP. 10μF16V	EJ10601610	CM63				482212240588	CER.CAP. 22000pF 25V	DA17223110	
C641	482212421895	ELECT CAP. 0.22μF 50V	EJ22405010	CU71	482212240588	CER.CAP. 0.022μF	DA17223110				
C642	482212240588	CER.CAP. 22000pF 25V	DA17223110	CX50				482212423056	ELECT CAP. 47μF 16V	EJ47601610	
C644	482212240588	CER.CAP. 22000pF 25V	DA17223110	CX51				482212480087	ELECT CAP. 220μF 6.3V	EJ22700610	
C645	482212240588	CER.CAP. 22000pF 25V	DA17223110	CX52				482212240588	CER.CAP. 22000pF 25V	DA17223110	
C649	482212421894	ELECT CAP. 10μF 16V	EJ10601610	CX53				482212480087	ELECT CAP. 220μF 6.3V	EJ22700610	
C651	482212421894	ELECT CAP. 10μF 16V	EJ10601610	CX54				482212240588	CER.CAP. 22000pF 25V	DA17223110	
C652	482212421894	ELECT CAP. 10μF 16V	EJ10601610	K/02B K/02B	CX55	532212232143	CER.CAP. 22pF J CH 50V	DD15220300			
C653	482212421899	ELECT CAP. 4.7μF 25V	EJ47502510		CX56	532212232143	CER.CAP. 22pF J CH 50V	DD15220300			
C654	482212421899	ELECT CAP. 4.7μF 25V	EJ47502510		CX57	532212232143	CER.CAP. 22pF J CH 50V	DD15220300			
C656	482212240588	CER.CAP. 22000pF 25V	DA17223110		CX58	532212232143	CER.CAP. 22pF J CH 50V	DD15220300			
C669	482212421899	ELECT CAP. 4.7μF 25V	EJ47502510		CX59	482212423054	ELECT CAP. 0.47μF 50V	EJ47405010			
C670	482212240588	CER.CAP. 22000pF 25V	DA17223110	CX60	482212232027	CER.CAP. 56pF J CH	DD15560300				
C671	482212240588	ELECT CAP. 47μF 16V BP	EQ47601630					CX61	482212423053	ELECT CAP. 1μF 50V	EJ10505010
C672		CER.CAP. 22000pF 25V	DA17223110					CX63	482212423053	ELECT CAP. 1μF 50V	EJ10505010
C683	482212480087	ELECT CAP. 220μF 6.3V	EJ22700610					CX66	482212231205	CER.CAP. 47pF J CH 50V	DD15470300
C684	482212480087	ELECT CAP. 220μF 6.3V	EJ22700610	CX67	482212560185	TRIM.CAP. VCT51E 20pF	CT12000200				
C692	482212240588	CER.CAP. 22000pF 25V	DA17223110	CX69	482212423056	ELECT CAP. 47μF 16V	EJ47601610				
CF71	482212423054	ELECT CAP. 0.47μF 50V	EJ47405010					CX70	482212423056	ELECT CAP. 47μF 16V	EJ47601610
CF72	482212423054	ELECT CAP. 0.47μF 50V	EJ47405010					CX71	482212240588	CER.CAP. 22000pF 25V	DA17223110
CF73	482212240588	CER.CAP. 0.022μF	DA17223110					1			
CF74	482212240588	CER.CAP. 0.022μF	DA17223110	CX73	482212423053	ELECT CAP. 1μF 50V	EJ10505010				
CL01	482212423055	ELECT CAP. 22μF 16V	EJ22601610	CX74							
CL02		482212421894	ELECT CAP. 10μF 16V	EJ10601610							
CL03		482212423055	ELECT CAP. 22μF 16V	EJ22601610							
CL04		482212421894	ELECT CAP. 10μF 16V	EJ10601610							
CL05		482212423055	ELECT CAP. 22μF 16V	EJ22601610							



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<u>C***</u>			<b>P604-CAPACITORS (COMMON)</b> High Dielectric Constant Ceramic Capacitor, $\pm 10\%$ 50V: C629,C658,CF75,CF76, CX11,CX62		<b>▲ R645</b>		482205210479	<b>P604-RESISTORS</b> FUSIBLE RES. $47\Omega \pm 5\%$ 1/4W	GG05470140
<u>C***</u>			Electrolytic Capacitor, $\pm 20\%$ : C623,C628,C655,C657, C695,C696		<u>R***</u>			<b>P604-RESISTORS (COMMON)</b> Carbon Film Fixed Resistor, $\pm 5\%$ 1/6W R601-R609,R611,R612, R614-R619,R641-R644, R651-R661,R663-R667, R669-R672,R674-R677, R681-R685,R687,R688, R691-R693,RF61-RF74, RL01-RL12,RL15-RL19, RM01-RM03,RM05-RM07, RM09-RM11,RM13-RM15, RM17-RM19,RM21-RM23, RM25-RM27,RM29-RM31, RM33-RM36,RM51-RM57, RM59-RM76,RM78-RM80, RU63,RU64,RU71-RU76, RX51-RX53,RX54[K/02B], RX55-RX57,RX59-RX62, RX65-RX68	
<u>C***</u>			Plastic Film Capacitor, $\pm 5\%$ 50V: C603-C611,C613-C616,C620, C626,C627,C630-C635,C638, C639,C659-C665,C667,C668, CM07-CM09,CM11-CM13, CM15-CM17,CM52-CM57, CX64,CX65					<b>P604-MISCELLANEOUS</b> 4P RCA PINJACK YEL GOLD 3P RCA PINJACK YEL.GOLD	YT02041080 YT02030340
DF71   DF76		482213032362	DIODE 1SS176,MA165,1SS254	HD20002000	JL01 JL02		482226531301 482226531299		
DL01   DL10		482213032362	DIODE 1SS176,MA165,1SS254	HD20002000	JM01 JM02 JM04		482226731953 482226731954 482226760415	SLW25S-1C7 1.00MFFC 9603S-13C SLW28S-1C7 28P	YJ06020250 YJ07008780 YJ06020280
DU21		482213032362	DIODE 1SS176,MA165,1SS254	HD20002000	LM01 LM02		482212610441 482212610441	DSS306-91FZ103N DSS306-91FZ103N	FM12103010 FM12103010
DX61		482213032362	DIODE 1SS176,MA165,1SS254	HD20002000	LX51 LX52 LX53		482215762909 482215763312 482224273843	LAL02TA220J 22 $\mu$ H LAL02TA5R6J 5.6 $\mu$ H DSS306-91-F-223Z	LC12233800 LC15623800 FM12223010
Q601		482220990533	LA2775	HC10340030	S601		482227721718	SLIDE SW SSSS9-23Z	SS02030560
Q602		482220970044	NJM2058D	HC10031090	SX51	K/02B	482227721718	SLIDE SW SSSS9-23Z	SS02030560
Q603		482220983631	NJM4558DD	HC10008090	XX51 XX52		482224280288 482224273903	X'TAL AT49/14.31818MHz X'TAL AT49 17.7MHz	JX14001260 JX17001260
Q604   Q606		482213042594	DTC144ES/UN4213	BA20002000				<b>P804-POWER SUPPLY, OUTPUT CIRCUIT BOARD</b>	
Q607		482220973275	TC9214P	HC10209050	<b>▲ C801</b>		482212233276	<b>P804-CAPACITORS</b> CER.CAP. DE7150 F 103M	DK17103840
Q608		482220932693	NJM2177L	HC10126090	C802   C805 C808		482212230103	CER.CAP. 0.022 $\mu$ F 50V	DK18223310
Q609		482220983631	NJM4558DD	HC10008090	C809		482212240586	CER.CAP. 10000pF 16V	DA17103110
Q610		482220970044	NJM2058D	HC10031090	C816		482212240586	CER.CAP. 10000pF 16V	DA17103110
QF52		482220970044	NJM2058D	HC10031090	C817		482212240586	CER.CAP. 10000pF 16V	DA17103110
QL01		482220931538	LC7824	HC10275030	C818		482212423056	ELECT CAP. 47 $\mu$ F 10V	EJ47601010
QL02		482220931538	LC7824	HC10275030	C819		482212423056	ELECT CAP. 47 $\mu$ F 10V	EJ47601010
QL03		482220932513	MC 14576	HC10046170	C823		482212441604	ELECT CAP. 0.1 $\mu$ F 50V	EJ10405010
QM01		482220983631	NJM4558DD	HC10008090	C824		482212421894	ELECT CAP. 10 $\mu$ F 16V	EJ10601610
QM02		482220983631	NJM4558DD	HC10008090	C829		482212423054	ELECT CAP. 0.47 $\mu$ F 50V	EJ47405010
QM03		482220932552	LC7821N	HC10308030	C830		482212423053	ELECT CAP. 1 $\mu$ F 50V	EJ10505010
QM51		482220970044	NJM2058D	HC10031090	C834		482212230043	CER.CAP. 0.01 $\mu$ F Z 50V	DK18103310
QM52		482220983804	LC4966	HC10150030	C836		482212240588	CER.CAP. 0.022 $\mu$ F	DA17223110
QM53		482213060766	DTA114ES/UN4111	BA10001000					
QM54		482213042594	DTC144ES/UN4213	BA20002000					
QM55		482213042594	DTC144ES/UN4213	BA20002000					
QX19		482220990532	NJU3713	HC10161090					
QX60		482220912668	LC74760	HC10328030					
QX61		482213042298	C536SP,C2458,C3311,C1740S	HT30001000					
QX62		482213042594	DTC144ES/UN4213	BA20002000					
QX63		482220932513	MC14576	HC10046170					

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C901 C902		482212240617 482212240617	CER.CAP. 0.1μF 50V +80 -20% CER.CAP. 0.1μF 50V +80 -20%	DD38104010 DD38104010	QW01		482220983274	NJM4560D	HC10007090
CW01 CW02 CW03 CW04 CW05		482212423057 482212423057 482212423056 482212423056 482212423056	ELECT CAP. 4.7μF 50V ELECT CAP. 4.7μF 50V ELECT CAP. 47μF 16V ELECT CAP. 47μF 16V CER.CAP. 2200pF 25V	EJ47505010 EJ47505010 EJ47601610 EJ47601610 DA17223110	▲ R801 ▲ R802 ▲ R821	U	482211710158 482211710158	RES. 1Ω ±5% 1/4W RES. 1Ω ±5% 1/4W RES. 2.2MΩ ±10% 1/2W	GG05010140 GG05010140 RC10225820
CW06		482212240588	CER.CAP. 2200pF 25V	DA17223110	R****			<b>P804-RESISTORS (COMMON)</b> Carbon Film Fixed Resistor, ±5% 1/6W R807-R819,R822,R823, R901-R907,R911-R917, R925-R928,RW01-RW04	
C***			<b>P804-CAPACITORS (COMMON)</b> High Dielectric Constant Ceramic Capacitor, ±10% 50V: (C903-C910[02B])		▲ F801 ▲ F801 ▲ F804	02B U 02B	4822207032001 482225340166	<b>P804-MISCELLANEOUS</b> FUSE 160mA 250V FUSE 500mA 250V FUSE T2.5A 250V	FS10020850 FS10050350 FS10250850
C***			Electrolytic Capacitor, ±20%: C806,C807,C810-C815, C820-C822,C825-C828, C831-C833,C835		▲ J803 ▲ J803	U/K 02B	482226731952	CCT1304-0211 AC OUTLET 2P (K)	YJ04002150 YJ04002080
D801 D802 ▲ D803 ▲ D804 ▲ D805		482213082421 482213082421 482213033057 482213033057 482213082421	DIODE 1D3 1A/200V DIODE 1D3 1A/200V DIODE S2VB20 DIODE S2VB20 DIODE 1D3 1A/200V	HD20002710 HD20002710 HE20011290 HE20011290 HD20002710	J901 J902 J903		482226750956 482229081723 482229081723	2MM PITCH 7P SOCKET RCA 2L4P W/R AU RCA 2L4P W/R AU	YJ06011670 YT02041070 YT02041070
▲ D806 D807 D808   D811		482213082421 482213080273 482213032362	DIODE 1D3 1A/200V ZENER DIODE 8.2V DIODE 1SS176,MA165,1SS254	HD20002710 HD30821000 HD20002000	▲ L801 ▲ L802  L901   L904		482228020534 482228070354  482228020501	RELAY G5P-1 RELAY VB24MBU-510.5A/240VAC  MR62-24SR 24V RELAY	LY10240220 LY20240310  LY20240410
▲ D812   ▲ D815 D816 D817		482213082421 482213080316 482213032362	DIODE 1D3 1A/200V ZENNER DIODE NTJ3.6A 3.6V DIODE 1SS176,MA165,1SS254	HD20002710 HD30361000 HD20002000				<b>P814-VOLTAGE SEL. CIRCUIT BOARD</b>	
▲ D818 ▲ D819 D820 ▲ D821   ▲ D826		482213082421 482213082421 482213081729 482213082421	DIODE 1D3 1A/200V DIODE 1D3 1A/200V ZENNER DIODE MTZJ33D DIODE 1D3 1A/200V	HD20002710 HD20002710 HD33301000 HD20002710	▲ F802 ▲ F803  ▲ SP51	K K  K	482225330394	<b>P814-MISCELLANEOUS</b> FUSE 315mA 250V FUSE 160mA 250V  SLIDE SW	FS10031850 FS10016850  SS02021510
D901 D902 D904		482213082421 482213082421 482213082421	DIODE 1D3 1A/200V DIODE 1D3 1A/200V DIODE 1D3 1A/200V	HD20002710 HD20002710 HD20002710					
Q801 ▲ Q802 ▲ Q803 ▲ Q804 ▲ Q805		482213060588 482220990536 482220961526 482220983819 482220930442	DTC114ES/UN4211 UPS7815H NJM79M15FA NJM78L06A NJM79L06A	BA20001000 HC38915060 HC39515090 HC38106090 HC39106090					
▲ Q806 ▲ Q807 ▲ Q808 Q809 Q810		482213061442 482213061359 482220932514 482213042298 482213042298	TRS. 2SD1913 TRS. 2SB1274 L78NR06 TRS. 2SC536SP/ETC. TRS. 2SC536SP/ETC.	HT419132B0 HT212742B0 HC10263030 HT30001000 HT30001000					
Q811 Q812 Q813 Q814 Q815		482213060766 482213060696 482213060766 482213060766 482220931925	DTA114ES/UN4111 TRS. 2SC1627 DTA114ES/UN4113 DTA114ES/UN4111 PQ6RA1	BA10001000 HT316272B0 BA10001000 BA10001000 HC36905320					